

64090 INDIAN BLUFF Determination of Public Land (Rangeland) Health for

The Record of Decision (ROD) for the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (dated January 2001) adopted three Standards for Public Land Health. These are (1) Upland Sites Standard, (2) Biotic Communities, Including Native, Threatened, Endangered, and Special Status Species Standard and (3) Riparian Sites Standard.

The ROD also established a process for the BLM Field Offices for the implementation. Through a public participation process, the Roswell Field Office developed and adopted indicators to use in conjunction with existing monitoring data to assess these standards.

Field assessment worksheets and other available data that evaluate the local indicators were completed for this allotment. The evaluation of the Biotic standard for most of the sites evaluated shared a common theme. At this time forbs constitute the bulk of the dietary constituents available for wild ungulates. The lack of sufficient quantity and quality of browse species as the preferred source of nutrition for mule deer restricts this allotment's potential for this species. Also, the woven wire fences in the allotment restrict gene flow between pronghorn populations residing in adjacent pastures. While evidence of reproduction of mule deer and pronghorn have been observed, it is not known at what rate or if those young will be recruited into the adult populations. These conditions originate from the historical use of the area but could be improved through the modification of current management practices.

Based on the assessments, it is my determination that public land within Indian Bluff allotment #64090 meets the Upland Sites standard and (2) Biotic Communities, including Native, Threatened, Endangered, and Special Status Species standard but not at the desired level. There are no public land riparian areas on this allotment, therefore this standard will not be addressed.

/s/ T. R. Kreager

Assistant Field Manager

09/28/2005

Date

Standards of Public Land Health

Evaluation of 64090 INDIAN BLUFF Allotment

[08/09/2005]

The Roswell Field Office conducted rangeland health assessments at 17 study sites within the Indian Bluff allotment 64090. The assessments looked at the Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within the vicinity of each study site. Existing monitoring data was incorporated into and in support of the field assessment. The summary of each assessment is attached and shown in the following table.

Study Area or Assessment Area	UPLAND			BIOTIC			RIPARIAN		
	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet
64090-#2-F225	X			X	*		N/A		
64090- ANTELOPE- F226	X			X			N/A		
64090-CEDAR- F231	X			X	*		N/A		
64090- CROOKED CREEK-F237 (*)	X			X			N/A		
64090-DARK CANYON-F233	X			X			N/A		
64090-E SAMPSON- F223	X			X			N/A		
64090-E TWIN BUTTE-F229 (*)	X			X			N/A		
64090-EAST TURNER-F232	X			X			N/A		
64090-FELIX- F239	X			X			N/A		
64090- HORSESHOE- F234 (*)	X			X			N/A		
64090-INDIAN	X			X			N/A		

BLUFF-F238 (*)									
64090-N WELL-CAMP-F227 (*)	X			X	*		N/A		
64090-S WELL CAMP-F228 (*)	X			X	*		N/A		
64090-SIXTEEN-F235 (*)	X			X			N/A		
64090-SOUTH TURNER-F236	X			X	*		N/A		
64090-W SAMPSON-F224	X			X			N/A		
64090-W TWIN BUTTE-F230	X			X			N/A		

Twenty-two (22) indicators for Rangeland Health were evaluated for public land on Indian Bluff, allotment #64090. Ten (10) of these assessed soil site stability, 11 hydrologic function and 13 biotic integrity. These qualitative assessments in conjunction with previous long-term quantitative data gathered on 17 range trend plot/study site locations were utilized to determine rangeland health of public land within this allotment. These data collections which were initiated in the late 1970's/early 1980's are scheduled and performed by the Roswell Field Office every 5 years and include some or all of the following: ground and vegetative cover and composition, production, frequency, occurrence and ecological condition.

This allotment is recovering from the dry conditions occurring over the last several years. Both sheep and cattle graze the pastures with net wire and smooth fencing respectively. Eight sites are CP-4 Very Shallow, two CP-4 Limestone Hills, four SD-3 Shallow and three SD-3 Loamy ecological sites. Antelope, West Sampson, Dark Canyon, Horseshoe, E. Twin Butte, East Turner, North and South Well Camp Pastures are CP-4 Very Shallow ecological sites on an Ector-Rock, outcrop complex with 0-9 percent slopes. The nearly level to gently rolling Ector soil and Rock outcrop occurs on limestone hills in the western and southwestern part of the survey area. Elevation ranges from 4,000 ft/1,212 m to 5,800 ft/1,758 m.

1. Antelope Pasture partially on private land is currently grazed by sheep with pronghorn (*Antilocapra americana*) and mule deer (*Odocoileus hemionus*) observed inhabiting the site covering 2,053 acres/831 hectares. A majority of indicators assessed rated None to Slight and Slight to Moderate. Small and cobble-size rock makes up the majority of ground cover with litter and vegetation accounting for the remainder. Annual production rates Moderate and is slightly higher than the long-term average but below (ESD)-

Ecological Site Description parameters estimated at 375 lbs/ac or kg/ha. Considering the amount of rock cover, litter was estimated well above the range expected at 20 percent. Prickly pear (*Opuntia* spp.) and snakeweed (*Gutierrezia sarothrae*) are scattered rating invasive plants Moderate. Skunkbush (*Rhus microphylla*), catclaw (*Acacia* spp.), range ratany (*Krameria parvifolia*), yucca (*Yucca* spp.), beargrass (*Nolina microcarpa*), mariola (*Parthenium incanum*) and desert agave (*Agave deserti*) make up the majority of shrubs both in draw and upland portions. Tridens (*Tridens* spp.) and black grama (*Bouteloua eriopoda*) are grass species encountered in small quantities. All other indicators assessed fall within normal range of variability.

2. East Twin Butte Pasture, in a state section is 1,813 acres/734 hectares in size, also rates the majority of indicators None to Slight and Slight to Moderate. Most indicators fall within normal range of variability with only slight departures from established parameters. The typical desert vegetation is comparable to Antelope Pasture. Snakeweed is common throughout and give the invasive plants a Moderate to Extreme rating. Annual forbs are curing and giving way to warmer season perennials. Rock, gravel and cobble cover here is high and estimated at approximately 60 percent.

3. Dark Canyon Pasture site covers 4,018 acres/1,627 hectares. All indicators with the exception of invasive plants rated None to Slight and Slight to Moderate with very minor deviations from established parameters. Tobosa (*Pleuraphis mutica*), blue grama (*Bouteloua gracilis*), black grama, Hall's panicum (*Panicum hallii*) and tridens are the chief grasses encountered. Cholla (*Opuntia spinosa*), javelinabush (*Condalia* spp.) and beargrass are shrub species observed.

4. East Turner Pasture, an upland site with an area of 2,430 acres/984 hectares is grazed by sheep at present. A recent storm event has re-located litter and other materials as evidenced by water flow and soil movement. Litter is down and rates Moderate. Numerous water flow patterns exist but remain short. Vegetative changes have negatively affected infiltration as runoff is observed. The black grama component remains but hairy grama (*Bouteloua hirsuta*) is gone. Functional/structural groups rates Moderate as a result. Rock cover is again at a 60 percent estimate and holds for the long-term average. Annual production, estimated at 250 lbs/ac or kg/ha is only 1/4 of potential and slightly less than the long-term average. Snakeweed and catclaw are scattered and rate invasive plants Moderate. Reproductive capability of perennial plants is compromised and there are slight limitations. Gnawing activity by rodents, possibly porcupine (*Erethizon dorsatum*) on catclaw bark has left this shrub dead or decadent with just a few remaining live branches. The indicator with biotic attributes, plant mortality & decadence rates Slight to Moderate as mortality is higher than expected. All other indicators fall within normal range of variability and deviate slightly from established parameters and expected values.

5. West Sampson Pasture currently has sheep grazing both upland and depressional areas next to water sources, ie, dirt tanks and reservoirs. The acreage is 2,413 or 977 hectares. Estimated ground cover readings were mainly rock and litter. Litter is comprised of annual forbs that have cured and giving way to warm season perennials. The interspace

ped sample melted readily using the soil site stability test suggesting a reduction in organic matter. This indicator rates Moderate. Soil surface loss or degradation also rates Moderate. A-horizon soil layers have been eroded in some areas from underneath plant canopies. Cholla, acacia and snakeweed are scattered, rating invasive plants Moderate. Threeawn (*Aristida* spp.) and tridens are found in small amounts. Forbs croton (*Croton* spp.) and buckwheat (*Eriogonum* spp.) were also encountered. The remainder of indicators fall within normal range of variability.

6. Horseshoe Pasture has no livestock at present. Encompassing 2,082 acres/843 hectares, the study site is located on slopes in excess of 10 percent grade upland from the drainage of Crooked Creek where obvious coulees are present. No overland flow is evidenced considering the slope. The majority of indicators assessed rate None to Slight and Slight to Moderate. Rock cover approaches 70-80 percent and acts as an adequate infiltration mechanism as water adheres to these surfaces due to surface tension. Snakeweed, prickly pear and cholla dominate and rate invasive plants Extreme. Skunkbush, javelinabush, desert willow (*Salix exigua*) and walnut (*Juglans* spp.) dominate the drainage. Giant sacaton (*Sporobolus gigantea*), tobosa and burrograss (*Scleropogon brevifolius*) are grasses also at the bottom. Wolf tail (*Lycurus phleoides*) and black grama are the major upland grasses. A good physical crust exists which protects the site as well.

7. South Well Camp Pasture is currently grazed by sheep. It is 2,163 acres/876 hectares in size. Our current estimate of ground cover indicates rock is 90 -100 percent. Long-term average is 71 percent and ESD parameter is 43 percent. In this instance, rock cover may need to replace bareground to appropriately reflect ground cover for this site. Functional/structural groups rates Moderate as an absence of grama and predominance of shrubs is observed. Annual production is only 1/4 and 1/3 of the ESD value and long-term average respectively. A current estimate of 150 lbs/ac or kg/ha rates this indicator Moderate. Litter is not a major component of ground cover here and has not been. Slight to Moderate, therefore is the rating given this indicator. Mariola was observed and appears to be increasing suggesting moderate to heavy sheep use.

8. North Well Camp Pasture has a number of indicators rating Moderate. Sheep are also in this pasture encompassing 3,288 acres/1,331 hectares for this site. Soil surface resistance to erosion and degradation, plant community composition and distribution relative to infiltration/runoff, functional/structural groups, invasive plants and physical crusts all deviate moderately from established parameters and long-term averages. Interspace ped samples melted readily using soil site stability tests indicating a reduction in organic matter. A-horizon layers are missing as evidenced by soil loss on the top, but remain intact to support some rooting. Infiltration is somewhat compromised but rock cover, historically averaging 40-47 percent is holding some water in place. Abundance of grass species is reduced especially the grama grass component. Tridens is the dominant grass along with tobosa and threeawn. Snakeweed is common throughout on upland portions and extends towards the draw head. Physical crusts are evident throughout but broken in continuity due to rock and gravel cover. Litter is made up mainly of annual forbs that have cured. All other indicators fall within normal range of variability.

9. South Turner Pasture is a CP-4 Limestone Hills ecological site. Soil is Ector/Rock outcrop on 3,436 acres/1,391 hectares. Sheep are utilizing this pasture at present. Indicators assessed fell mainly within None to Slight and Slight to Moderate categories. Bareground however rated Moderate estimated at 20-30 percent exceeding the ESD value of 18 and long-term average of 3.6. There are at least three different two-tracks leading into this site. Ranch and hunting roads dissect this pasture which may account for augmented bareground readings. Functional/structural groups rates Moderate. Blue grama and green sprangletop (*Leptochloa dubia*) are missing and replaced by fluffgrass (*Dasyochloa pulchella*), threeawn and tridens. Dogweed (*Dyssodia* spp.), mariola and cholla add to shrub components here. Annual production is estimated at 350 lbs/ac or kg/ha falling short of the ESD value of 1,225 for normal years but just slightly lower than the long-term average of 486. Invasive plants rates Moderate as snakeweed is scattered throughout. Forbs, buckwheat and croton, along with black grama remain on site. All other indicators assessed fall within normal range of variability.

10. Cedar Pasture is approximately 1/2 mile from water, also on a CP-4 Limestone Hills ecological site with Ector/Rock outcrop soil. The site is 2,398 acres/971 hectares in size and currently grazed by sheep. Indicators assessed rated Slight to Moderate and None to Slight exhibiting normal range of variability with a few exceptions. Bareground is estimated at 30 percent rating Moderate. Most plant groups are intact with smaller proportions of grama, threeawn, burrograss and squirreltail (*Sitanion hystrix*). Forbs, woolly indian wheat (*Plantago* spp.), buckwheat and croton dominate the lower reaches of this upland site. Mariola is the dominate shrub suggesting continued livestock use. Annual production rates Moderate with approximately 60 percent of potential currently estimated. Considering these and other factors, the site remains in stable condition. Cholla, snakeweed and catclaw all are scattered and rate invasive plants Moderate.

11. W. Twin Butte Pasture, a SD-3 Loamy ecological site is 1,382 acres/559 hectares in size. The soil is a Reakor-Pecos association that occurs in valleys between low hills and limestone areas. Slopes are 0 to 3 percent on elevations between 3,300 ft/1000m and 3,900 ft/1,182 m. Most indicators assessed rated Slight to Moderate with minor deviations from normal range of variability. Tobosa and burrograss dominate this lowland site with annual forbs curing and giving way to perennials such as globemallow (*Sphaeralcea* spp.) and croton. Sheep use this pasture for part of the year and utilize cholla and condalia along with some grass. This site also includes upland areas east and south dominated by cholla and snakeweed which are scattered.

12. Felix Pasture, also a SD-3 Loamy ecological site, encompasses 2,002 acres/810 hectares. Bigetty-Pecos is the soil association. This soil occurs on channeled flood plains of the Rio Hondo and Felix respectively but rarely floods. Slopes are 0 to 1 percent on elevations between 3,300 ft/1,000 m and 4,500 ft/1,364 m. A herd of cattle are currently using this pasture, but at a very conservative rate. This site is situated in a transitional zone between the Rio Felix drainage and an upland loamy complex. Only slight to moderate deviations exist for the indicators assessed. The lone indicator of concern is structural/functional groups exhibiting Moderate departures. Some perennial vegetation is missing such as sideoats (*Bouteloua curtipendula*), blue and black grama. The vegetative

ground cover however is adequate for site protection and annual production is high with an estimate of 450 lbs/ac or kg/ha. The site is very stable in soil, hydrologic and biotic attributes. The diversity of forbs, grass and shrubs is high for this area, as the drainage supports pseudo-riparian vegetation such as walnut, desert willow, giant sacaton and other representative species. The loamy upland complex consists of grasses; burrograss, tobosa and ear muhly (*Muhlenbergia arenicola*); forbs filaree (*Erodium* spp.), woolly indian wheat, globemallow and croton; shrubs snakeweed, prickly pear, Christmas cholla, snakeweed and mesquite. Some cattle trailing is evident as undoubtedly these animals traverse the drainage.

13. Crooked Creek Pasture, the remaining SD-3 Loamy ecological site is 3,472 acres/1,406 hectares in size. The soil association is Pecos-Dev and occurs in valleys of limestone hills along drainages west and southwest of the area surveyed. The slope is 0 to 3 percent on 3,300 ft/1,000 m to 4,500 ft/1,363 m elevation. No livestock were seen at the time of evaluation. Indicators assessed rated mainly Slight to Moderate exhibiting minor ranges of variability from established parameters. The site is missing the grama and muhly (*Muhlenbergia* spp.) grass components although tobosa and burrograss are abundant along the bottom. Functional/structural groups rates Moderate as a result. Invasive plants rates Moderate to Extreme as prickly pear and cholla are common throughout and potentially pose a threat to dominate. The annual forb component however is breaking down and forming an adequate mulch layer adding organic matter to the soil.

14. Pasture #2 is a SD-3 Shallow ecological site that encompasses 1,824 acres/738 hectares. The soil is a Lozier-Tencee complex occurring in the west-central part of the survey area. These formed in cobbly residual materials on low, limestone and indurated caliche hills. Slopes are 1 to 9 percent on elevations between 3,900 ft/1,182 m and 4,200 ft/1,272 m. No livestock are present. Most ground cover currently is comprised of small and cobble-sized rock. There is virtually no litter on the soil surface. Organic matter is reduced on this shallow site as exhibited by rapid melting of under the canopy soil ped samples. Resistance to erosion is reduced throughout resulting in a Moderate rating. Runoff is greater here suggesting infiltration has been hindered although rock cover is significant. Adverse changes in plant community coupled with dry conditions justify a Moderate rating. Functional/structural groups such as the grama grasses are missing and gradually being replaced by tridens and threeawn. F/S groups rates Moderate as does annual production which is estimated below the long-term average. Snakeweed and cholla are scattered throughout and give invasive plants a Moderate score. All other indicators however marginal remain within the normal range of variability.

15. Indian Bluff Pasture, with an acreage of 435 or 176 hectares has the similar soil phase as Pasture #2. Sheep are utilizing this site which is located on an upper bench northeast of Rio Felix. Although impacted by dry conditions and sheep use, the majority of indicators rated None to Slight and Slight to Moderate with normal ranges of variability from established parameters. Litter movement rates Moderate due to the piling of litter against obstructions and in depressional areas. Annual forbs have now cured and dried have been replaced by warm season perennials such as bladderpod (*Lesquerella* spp.), globemallow,

croton and hog potato (*Hoffanseggia* spp.) making up most of the litter component here. The grammas and dropseeds are missing in the area and have been replaced by threeawn and other shrubs. F/S groups rates Moderate due to this replacement. Creosote (*Larrea tridentata*) is common on this site along with scatterings of snakeweed. A physical crust is found but is very broken in continuity.

16. East Sampson Pasture is the remaining SD-3 Shallow ecological site with a Lozier-Tencee soil phase. It encompasses 1,770 acres/717 hectares. Indicators with all three; soil, hydrologic and biotic attributes rated None to Slight and Slight to Moderate indicating fair to good ecological condition. Grass species show very slight deviations from what should be on site. Litter is more than adequate with an estimation of 20 percent. Production is up from previous years and falls within normal range. Invasives, catchaw and snakeweed are scattered and rate Moderate. Agave is in bloom on the upland portions. The brush component is not as prevalent as other shallow sites. Tobosa dominates the bottom where water has settled. Thistles (*Cirsium* spp.) also dominate the area. Considering recent dry conditions, the site matches most capabilities expected.

17. Sixteen Pasture is the lone SD-3 Shallow ecological site with an Ector-Rock soil phase. This shallow site is 3,891 acres/1,575 hectares in size. No livestock are currently utilizing this pasture. Bareground is currently estimated at 30 to 40 percent, exceeding the long-term average of 5.6. Litter amount is now estimated at 10 percent and is within normal range. Annual forbs have cured and are allowing perennials like croton and buckwheat to establish. Snakeweed is common and rates invasive plants Moderate to Extreme. This rating alone will not skew the biotic attributes enough to warrant an at risk situation here. All other indicators fall within normal range of variability with None to Slight and Slight to Moderate ratings.

Hydrology -

#2 Pasture - The bareground indicator rated moderate. The amount of bareground has possibly increased due to recent dry conditions and wind/water erosion processes. Soil surface resistance to erosion rated moderate. The soil stability test showed a rapid melting under the plant canopy ped sample. The plant community composition and distribution relative to infiltration/runoff rated moderate. The recent dry conditions have possibly increased conversion from grassland to shrubland reducing infiltration and augmented runoff. The increase of all species and class would help water infiltration and decrease runoff. All other indicators rated none to slight and slight to moderate indicating a healthy ecological condition in relation to these indicators.

Antelope Pasture - The rills, water flow patterns, pedestals and/or terracettes, bareground, gullies, wind-scoured, blowouts, and/or deposition areas, litter movement, soil surface resistance to erosion, soil surface loss or degradation, plant community composition and distribution relative to infiltration and runoff, compaction layer, litter amount, and physical/chemical/biological crusts indicators have rated none to slight and slight to moderate, indicating a healthy ecological condition.

Cedar Pasture - The rills, water flow patterns, pedestals and/or terracettes, bareground, gullies, wind-scoured, blowouts, and or deposition areas, litter movement, soil surface resistance to erosion, soil surface loss or degradation, plant community composition and distribution relative to infiltration and runoff, compaction layer, litter amount, and physical/chemical/biological crusts indicators have rated none to slight and slight to moderate, indicating a healthy ecological condition.

Crooked Creek Pasture - The rills, water flow patterns, pedestals and/or terracettes, bareground, gullies, wind-scoured, blowouts, and or deposition areas, litter movement, soil surface resistance to erosion, soil surface loss or degradation, plant community composition and distribution relative to infiltration and runoff, compaction layer, litter amount, and physical/chemical/biological crusts indicators have rated none to slight and slight to moderate, indicating a healthy ecological condition.

Dark Canyon Pasture - The rills, water flow patterns, pedestals and/or terracettes, bareground, gullies, wind-scoured, blowouts, and or deposition areas, litter movement, soil surface resistance to erosion, soil surface loss or degradation, plant community composition and distribution relative to infiltration and runoff, compaction layer, litter amount and physical/chemical/biological crusts indicators have rated none to slight and slight to moderate, indicating a healthy ecological condition.

Sampson Pasture - The rills, water flow patterns, pedestals and/or terracettes, bareground, gullies, wind-scoured, blowouts, and or deposition areas, litter movement, soil surface resistance to erosion, soil surface loss or degradation, plant community composition and distribution relative to infiltration and runoff, compaction layer, litter amount, and physical/chemical/biological crusts indicators have rated none to slight and slight to moderate, indicating a healthy ecological condition.

Twin Butte Pasture - The rills, water flow patterns, pedestals and/or terracettes, bareground, gullies, wind-scoured, blowouts, and or deposition areas, litter movement, soil surface resistance to erosion, soil surface loss or degradation, plant community composition and distribution relative to infiltration and runoff, compaction layer, litter amount, and physical/chemical/biological crusts indicators have rated none to slight and slight to moderate, indicating a healthy ecological condition.

East Turner Pasture - The litter movement indicator rated moderate. The decrease in litter movement suggests that dry conditions have negatively affected growing conditions reducing litter production and it's movement. Litter is located against obstructions. The plant community composition and distribution relative to infiltration and runoff rated moderate. A reduction of plant cover has resulted in decreased infiltration resulting in increased runoff. The increase of all species and class would help water infiltration and curtail runoff. All other indicators rated none to slight and slight to moderate indicating a healthy ecological condition in relation to these indicators.

Felix Pasture - The rills, water flow patterns, pedestals and/or terracettes, bareground, gullies, wind-scoured, blowouts, and or deposition areas, litter movement, soil surface

resistance to erosion, soil surface loss or degradation, plant community composition and distribution relative to infiltration and runoff, compaction layer, litter amount and physical/chemical/biological crusts indicators have rated none to slight and slight to moderate, indicating a healthy ecological condition.

Horseshoe Pasture - The rills, water flow patterns, pedestals and/or terracettes, bareground, gullies, wind-scoured, blowouts, and or deposition areas, litter movement, soil surface resistance to erosion, soil surface loss or degradation, plant community composition and distribution relative to infiltration and runoff, compaction layer, litter amount and physical/chemical/biological crusts indicators have rated none to slight and slight to moderate, indicating a healthy ecological condition.

Indian Bluff Pasture - The litter movement indicator rated moderate. The decrease in litter movement suggests that the dry weather has negatively affected growing conditions reducing litter production and movement. Litter is located against obstructions.

N. Well Camp Pasture - Soil surface resistance to erosion rated moderate. Soil site stability test indicated a rapid melting of interspace ped samples. Organic matter is lacking. The physical/biological crust indicator rated moderate. There was a lack of physical soil crusts. Physical crusting is very weak. Plant community composition and distribution relative to infiltration and runoff rated moderate. The reduction in plant cover has resulted in decreased infiltration runoff increase. The increase of all species and class would help water infiltration and decrease runoff. All other indicators rated none to slight and slight to moderate indicating a healthy ecological condition.

S. Well Camp Pasture - The rills, water flow patterns, pedestals and/or terracettes, bareground, gullies, wind-scoured, blowouts, and or deposition areas, litter movement, soil surface resistance to erosion, soil surface loss or degradation, plant community composition and distribution relative to infiltration and runoff, compaction layer, litter amount and physical/chemical/biological crusts indicators have rated none to slight and slight to moderate, indicating a healthy ecological condition.

Sixteen Pasture - The rills, water flow patterns, pedestals and/or terracettes, bareground, gullies, wind-scoured, blowouts, and/or deposition areas, litter movement, soil surface resistance to erosion, soil surface loss or degradation, plant community composition and distribution relative to infiltration and runoff, compaction layer, litter amount, and physical/chemical/biological crusts indicators have rated none to slight and slight to moderate, indicating a healthy ecological condition.

South Turner Pasture - The bareground indicator rated moderate. The amount of bareground has possibly increased due to recent dry conditions and wind/water erosion processes. The rills, water flow patterns, pedestals and/or terracettes, bareground, gullies, wind-scoured, blowouts, and or deposition areas, litter movement, soil surface resistance to erosion, soil surface loss or degradation, plant community composition and distribution relative to infiltration and runoff, compaction layer, litter amount and

physical/chemical/biological crusts indicators have rated none to slight and slight to moderate, indicating a healthy ecological condition.

W. Sampson Pasture - Soil surface resistance to erosion rated moderate. Soil site stability testing indicates a rapid melting of interspace ped samples. Organic matter is lacking on this site. The soil surface loss or degradation rated moderate. The recent dry conditions, decrease in strength of physical crusts and/or absence, wind velocity, surface dryness, and reduced amount of surface plant cover has possibly increased soil horizon surface loss to degradation. Organic matter content has been reduced. All other indicators rated none to slight and slight to moderate indicating a healthy ecological condition.

W. Twin Butte Pasture - The rills, water flow patterns, pedestals and/or terracettes, bareground, gullies, wind-scoured, blowouts, and/or deposition areas, litter movement, soil surface resistance to erosion, soil surface loss or degradation, plant community composition and distribution relative to infiltration and runoff, compaction layer, litter amount and physical/chemical/biological crusts indicators rated none to slight and slight to moderate, indicating a healthy ecological condition.

Wildlife

Mule deer, pronghorn, Barbary sheep (*Ammotragus lervia*), scaled quail (*Callipepla squamata*), mockingbirds (*Mimus polyglottos*), turkey vultures (*Cathartes aura*), collared lizard (*Crotaphytus collaris*) and jackrabbits (*Lepus californicus*) have been observed in this allotment, as have various passerine birds, small mammals, and other reptilian species. Wildlife observations in this allotment indicate that they reside in it. However, the woven wire fences in the allotment restrict the gene flow for pronghorn between populations residing in adjacent pastures. While evidence of reproduction of mule deer and pronghorn have been observed, it is not known at what rate or if those young will be recruited into the adult populations. Additionally, competition with sheep for forage species can be detrimental to the wild ungulates well being. Forbs constitute the bulk of the dietary constituents available for wild ungulates. The lack of sufficient quantity and quality of browse species as the preferred source of nutrition for mule deer restricts this allotments potential for this species. Wildlife population data do not exist for this allotment therefore an assessment as to the status of these various species is not possible at this time.

Antelope, East Twin Butte, East Turner, West Sampson, Felix, Crooked Creek Pastures, and Pasture #2

Browse species were observed; however, browse species comprise a small portion of the vegetative community. This in turn results in some reduction in cover for mule deer. The lack of sufficient quantity and quality of browse species as the preferred source of nutrition for mule deer restricts this allotment's potential for this species. Forbs constitute the bulk of the dietary constituents available for mule deer. Because of the reduced quantities of available forage, a Moderate rating is required for wildlife habitat.

Mule deer, pronghorn, and jackrabbits were observed as were various passerine birds. Some burrowing activity by rodents is present in a few of these pastures indicating that at the very least, this component of the wild fauna is represented in them.

Dark Canyon Pasture

The lack of sufficient quantity and quality of browse species as the preferred source of nutrition for mule deer restricts this allotments potential for this species. Forbs constitute the bulk of the dietary constituents available for wild ungulates. Because of the reduced quantities of available forage, a Moderate rating is required for wildlife habitat.

Mule deer, Barbary sheep and pronghorn were the ungulates observed.

Horseshoe Pasture

Mule deer and pronghorn sign in the bottoms suggests these species utilize those areas for food and cover. Snakeweed, prickly pear and cholla dominate the uplands. Skunkbush, javelinabush, desert willow and walnut dominate the drainage. Giant sacaton, tobosa and burrograss are grasses found in the bottoms. Wolftail and black grama are the major upland grasses. This mix of vegetation types suggest that this pasture may be more amenable for supporting diverse wildlife populations than other pastures in the allotment thus a rating of Slight to Moderate is appropriate.

Pronghorn, mule deer sign, numerous coveys of scaled quail with fledglings and jackrabbits were observed.

South Well Camp Pasture

Some browse species were observed; however, browse species appear to be increasing in the vegetative community. This in turn results in an increase in cover for mule deer. The lack of sufficient quantity and quality of browse species as the preferred source of nutrition for mule deer restricts this allotments potential for this species. Forbs continue to constitute the bulk of the dietary constituents available for wild ungulates. Because of the reduced quantities of available quality forage, a Moderate rating is required for wildlife habitat.

Mule deer and jackrabbits were observed as were various passerine birds and raptors.

North Well Camp and South Turner Pastures

Some browse species observed in the drainages were condalia and rhus; however, browse species comprise a very small portion of the vegetative community. This in turn results in a reduction in cover for mule deer. The lack of sufficient quantity and quality of browse species as the preferred source of nutrition for mule deer restricts this allotments potential for this species. Forbs constitute the bulk of the dietary constituents available for mule

deer. Because of the low quantities of available forage, a Moderate rating is required for wildlife habitat

Pronghorn, mule deer and jackrabbits were observed as were various passerine birds and raptors.

Cedar Pasture

Some desirable browse species were observed; however, they comprise a very small portion of the vegetative community. This in turn results in a reduction in cover and forage for mule deer. Forbs constitute the bulk of the dietary constituents available for mule deer. Because of the reduced quantities of available forage, a Moderate rating is required for wildlife habitat.

Mockingbirds and turkey vultures were observed inhabiting the uplands and draws. Scaled quail were heard calling as well. Very little burrowing activity was observed indicating that perhaps burrowing mammal populations are at some reduced state in this pasture.

W. Twin Butte and Sixteen Pastures

The lack of sufficient quantity and quality of browse species as the preferred source of nutrition for mule deer restricts this allotments potential for this species. Forbs constitute the bulk of the dietary constituents available for wild ungulates. Because of the reduced quantities of available forage, a Moderate rating is required for wildlife habitat.

Pronghorn, mule deer, scaled quail and jackrabbits inhabit the site as do various passerine birds and raptors.

Indian Bluff Pasture

Mule deer and lagomorphs observed. Some browse species were found in the drainages; however, desirable browse species are being replaced by invasives in the vegetative community. This in turn results in a reduction in cover and forage for mule deer. Forbs constitute the bulk of the dietary constituents available for wild ungulates. Because of the reduced quantities of available forage, a Moderate rating is required for wildlife habitat.

East Sampson Pasture

Some browse species were observed; however, browse species comprise a very small portion of the vegetative community. This in turn results in a reduction in cover for mule deer. Forbs constitute the bulk of the dietary constituents available for wild ungulates. Because of the reduced quantities of available forage, a Moderate rating is required for wildlife habitat.

Collared lizard (*Crotaphytus collaris*) was observed as were numerous passerine birds, turkey vultures, and lagomorphs. Pronghorn and mule deer inhabit this pasture.

In the professional opinion of the Assessment Team, public land within Indian Bluff allotment #64090, meets Upland and Biotic standards. There are no Riparian issues present, therefore this standard was not addressed. See recommendations and site notes for further information regarding this ecological site.

The (*) indicates that the assessment had one or more indicator(s) rated moderate/extreme or extreme. These indicators are:

- Invasive Plants

These indicators by themselves are not enough to rate the site as not meeting a standard but may warrant future monitoring.

Recommendations: Current grazing schemes that allow for both cattle and sheep to use certain pastures, should be reviewed to ensure continued prudent practices remain intact. Carrying capacity for Indian Bluff is adequate at the moment and if drought conditions are foreseen, then adjustments could be made. The allotment as a whole is recovering from past dry conditions and is rebounding. Both winter and summer precipitation benefit this allotment due to a wide range of vegetation and ecosites.

Brush treatment may be necessary in the future to curtail shrub encroachment that may inhibit grass production in certain areas/ pastures. At present, the current mosaic of shrub species allows wildlife opportunity for cover and food.

RFOs Upland and Biotic Standard Assessment Summary Worksheet						
SITE 64090-#2-F225						
Legal Land Desc	NENE 14 0130S 0210E Meridian 23		Acreage		1824	
Ecosite	042CY025NM SHALLOW SD-3		Photo Taken		Y	
Watershed	13060009040 FELIX					
Observers	NAVARRO/MCGEE		Observation Date		06/10/2005	
County Soil Survey	NM666 CHAVES SOUTH		Soil Var/Taxad			
Soil Map Unit	Lt		Soil Taxon Name		LOZIER	
Texture Class	NM666 GRV-L		Soil Phase		LOZIER-TENCEE	
Texture Modifier	NM666 COBBLY LOAM					
Observed Avg Annual Precipitation			Observed Avg Growing Season Precipitation			
NOAA Annual Precipitation	6.87		NOAA Growing Season Precipitation		5.8	
NOAA Avg Annual Precipitation	14.98		NOAA Avg Growing Season Precipitation		12.8	
Disturbances and Animal Use:	Sheep is the livestock primarily on the allotment but were not observed on this ite at the time of evaluation.					
Part 2. Attributes and Indicators						
		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground			X		
Comments:	Ground cover is mostly rock with some bareground patches.					
S H	Gullies				X	

Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement				X	
Comments:						
S H B	Soil Surface Resistance to Erosion			X		
Comments:	Plant canopy soil sample displays reduced resistance to erosion.					
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff			X		
Comments:	Infiltration is compromised due to the absence of plant cover although the amount of gravel and rock should slow down runoff.					
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups			X		
Comments:	Absence of grammas and rhus species.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount			X		
Comments:	Very little litter exists.					
B	Annual Production			X		
Comments:	40% of the potential is the current estimate at best.					
B	Invasive Plants			X		
Comments:	Snakeweed is scattered.					
B	Reproductive Capability of Perennial Plants				X	
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:	A weak physical crust is observed but not entirely intact.					
B	Wildlife Habitat			X		

Comments:	Some browse species were observed, however, browse species comprise a very small portion of the vegetative community. This in turn results in a reduction in cover for mule deer. Forbs constitute the bulk of the dietary constituents available for both mule deer and pronghorn antelope. Because of the reduced quantities of available forage, a moderate rating is required for wildlife habitat					
B	Wildlife Populations				X	
Comments:	Muledeer and jackrabbits were observed as were various passerine birds. Wildlife observations in this pasture would indicate that they reside in it; however, the woven wire fences in the allotment restrict the gene flow of pronghorn antelope between and among populations residing in adjacent pastures. Wildlife population data do not exist for this allotment therefore an assessment as to the status of the various species is not possible at this time. While evidence of reproduction of muledeer and pronghorn antelope have been observed, it is not known at what rate or if those young will be recruited into the adult populations.					
B	Special Status Species Habitat					X
Comments:	None known to occur.					
B	Special Status Species Populations					X
Comments:	None known to occur.					
Part 3. Summary						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	2	5	3
H	Hydrologic	0	0	4	5	2
B	Biotic	0	0	6	3	4
B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the <i>Does not Meet</i> column, Moderate becomes <i>May Need More Info</i> , and Slight to Moderate and None to Slight merge to form the <i>Meets</i> columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that						

lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	2	8
Hydrologic		0	4	7
Biotic	The perennial grass component is reduced; the shrub component however appears to be on the rise.	0	6	7

Site Notes: This ecological site is observed to have reduced perennial grass along with a slight upward trend of shrubs, most notably acacia, nolina, cholla, yucca and especially snakeweed. Snakeweed is found throughout the shallow upland areas of this whole allotment and dominates in some pastures. It is scattered throughout here. The forb component is somewhat down.

RFOs Upland and Biotic Standard Assessment Summary Worksheet						
SITE 64090-ANTELOPE-F226						
Legal Land Desc	NESW 26 0130S 0210E Meridian 23		Acreage		2053	
Ecosite	070DY158NM VERY SHALLOW CP-4		Photo Taken		Y	
Watershed	13060009030 TWIN BUTTE					
Observers	NAVARRO/ARTHUN/JAQUEZ		Observation Date		06/03/2005	
County Soil Survey	NM666 CHAVES SOUTH		Soil Var/Taxad			
Soil Map Unit	EcC		Soil Taxon Name		ECTOR	
Texture Class	NM666 CB-L		Soil Phase		ECTOR-ROC	
Texture Modifier	NM666 COBBLY LOAM					
Observed Avg Annual Precipitation			Observed Avg Growing Season Precipitation			
NOAA Annual Precipitation	6.87		NOAA Growing Season Precipitation		5.8	
NOAA Avg Annual Precipitation	14.85		NOAA Avg Growing Season Precipitation		12.66	
Disturbances and Animal Use:	Livestock on this site is primarily sheep.					
Part 2. Attributes and Indicators						
		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns					X
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:	Some pedestaling on rocks.					
S H	Bare Ground				X	

Comments:	Bareground is estimated at 20%, but the majority of ground cover is rock. Long-term average is 18% for bareground with 60% for rock cover..					
S H	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement					X
Comments:						
S H B	Soil Surface Resistance to Erosion				X	
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups			X		
Comments:	Absence of the grama grass component.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:	Now estimated at 10-15%, which exceeds the long-term average and ESD of 4 and 1% respectively.					
B	Annual Production				X	
Comments:	350 lbs/ac or kg/ha is the current estimate. Long-term average is approximately 270 lbs/ac or kg/ha.					
B	Invasive Plants			X		
Comments:	Snakeweed is scattered.					
B	Reproductive Capability of Perennial Plants					X
Comments:						

S	Physical/Chemical/Biological Crusts				X	
Comments:	Physical crusts evident.					
B	Wildlife Habitat			X		
Comments:	Some browse species were observed; however, browse species comprise a very small portion of the vegetative community. This in turn results in a reduction in cover for mule deer. Forbs constitute the bulk of the dietary constituents available for both mule deer and pronghorn antelope. Because of the reduced quantities of available forage, a moderate rating is required for wildlife habitat					
B	Wildlife Populations				X	
Comments:	Mule deer, pronghorn antelope, and jackrabbits were observed as were various passerine birds. Wildlife observations in this pasture would indicate that they reside in it; however, the woven wire fences in the allotment restrict the gene flow for pronghorn antelope between and among populations residing in adjacent pastures. Wildlife population data do not exist for this allotment therefore an assessment as to the status of the various species is not possible at this time. While evidence of reproduction of mule deer and pronghorn antelope have been observed, it is not known at what rate or if those young will be recruited into the adult populations.					
B	Special Status Species Habitat					X
Comments:	None known to occur.					
B	Special Status Species Populations					X
Comments:	None known to occur.					
Part 3. Summary						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	5	5
H	Hydrologic	0	0	0	5	6
B	Biotic	0	0	3	4	6
B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the						

table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		0	3	10

Site Notes: This site is currently being grazed by sheep. Muledeer and lagomorphs were observed on site. Some use on acacia can be seen with condalia, agave, nolina, mariola and other shrubs. Long-term average for rock cover is 60% including large and small rock. Perennial grass is primarily tridens and some black grama.

RFOs Upland and Biotic Standard Assessment Summary Worksheet						
SITE 64090-CEDAR-F231						
Legal Land Desc	NENW 11 0140S 0210E Meridian 23		Acreage		2398	
Ecosite	070DY151NM LIMESTONE HILLS CP		Photo Taken		Y	
Watershed	13060009030 TWIN BUTTE					
Observers	NAVARRO/ARTHUN/JAQUEZ		Observation Date		06/03/2005	
County Soil Survey	NM666 CHAVES SOUTH		Soil Var/Taxad			
Soil Map Unit	EcD		Soil Taxon Name		ECTOR	
Texture Class	NM666 CB-L		Soil Phase		ECTOR-ROC	
Texture Modifier	NM666 COBBLY LOAM					
Observed Avg Annual Precipitation			Observed Avg Growing Season Precipitation			
NOAA Annual Precipitation	6.87		NOAA Growing Season Precipitation		5.8	
NOAA Avg Annual Precipitation	14.85		NOAA Avg Growing Season Precipitation		12.66	
Disturbances and Animal Use:	Livestock on this site is primarily sheep.					
Part 2. Attributes and Indicators						
		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:	Some pedestaling on rocks and shrubs.					
S H	Bare Ground				X	

Comments:	Now estimated at 30%.					
S H	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement					X
Comments:						
S H B	Soil Surface Resistance to Erosion				X	
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups			X		
Comments:	Absence of grama grass and replaced with threeawn and tridens. Mariola is the shrub which is dominating this site which suggests over-use by livestock.					
B	Plant Mortality/Decadence					X
Comments:	Some mortality on acacia.					
H B	Litter Amount				X	
Comments:	Estimate is currently 10-15%.					
B	Annual Production			X		
Comments:	Estimate is 300 lbs/ac or kg/ha.					
B	Invasive Plants			X		
Comments:	Snakeweed is scattered along with acacia and cholla. Mariola is common.					
B	Reproductive Capability of Perennial Plants				X	
Comments:						
S	Physical/Chemical/Biological Crusts				X	

Comments:	Physical crusting evident.					
B	Wildlife Habitat			X		
Comments:	Some desirable browse species were observed; however, they comprise a very small portion of the vegetative community. This in turn results in a reduction in cover and forage for mule deer. Forbs constitute the bulk of the dietary constituents available for mule deer. Because of the reduced quantities of available forage, a moderate rating is required for wildlife habitat.					
B	Wildlife Populations			X		
Comments:	Mockingbirds (<i>Mimus polyglottos</i>) and turkey vultures (<i>Cathartes aura</i>) were observed inhabiting the uplands and draws. Scaled quail (<i>Callipepla squamata</i>) were heard calling as well. Very little burrowing activity was observed indicating that perhaps burrowing mammal populations are at some reduced state. Wildlife population data do not exist for this allotment therefore an assessment as to the status of the various species is not possible at this time.					
B	Special Status Species Habitat					X
Comments:	None known to occur.					
B	Special Status Species Populations					X
Comments:	None known to occur.					
Part 3. Summary						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	6	4
H	Hydrologic	0	0	0	7	4
B	Biotic	0	0	5	4	4
B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the <i>Does not Meet</i> column, Moderate becomes <i>May Need More Info</i> , and Slight to Moderate and None to Slight merge to form the <i>Meets</i> columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the						

ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		0	5	8

Site Notes: This site is currently utilized by sheep. Mariola is common throughout which suggests over-use by livestock. There is no evidence of use on this shrub. Blue grama and buckwheat are found in lesser amounts. Beargrass and prickly pear are common also. Snakeweed is also found. Some forb component exists.

RFOs Upland and Biotic Standard Assessment Summary Worksheet						
SITE 64090-CROOKED CREEK-F237						
Legal Land Desc	SWNW 29 0140S 0210E Meridian 23		Acreage		3472	
Ecosite	042CY007NM LOAMY SD-3		Photo Taken		Y	
Watershed	13060009020 MIDDLE FELIX					
Observers	NAVARRO/ARTHUN		Observation Date		07/07/2005	
County Soil Survey	NM666 CHAVES SOUTH		Soil Var/Taxad			
Soil Map Unit	PH		Soil Taxon Name		PECOS	
Texture Class	NM666 GR-L		Soil Phase		PECOS-DEV	
Texture Modifier	NM666 SILTY CLAY LOAM					
Observed Avg Annual Precipitation			Observed Avg Growing Season Precipitation			
NOAA Annual Precipitation	6.87		NOAA Growing Season Precipitation		5.8	
NOAA Avg Annual Precipitation	14.85		NOAA Avg Growing Season Precipitation		12.66	
Disturbances and Animal Use:	No livestock in this pasture presently.					
Part 2. Attributes and Indicators						
		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground				X	

Comments:	Current estimate is 30%.					
S H	Gullies				X	
Comments:	Only on the roads leading into the site.					
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement				X	
Comments:	Some displacement.					
S H B	Soil Surface Resistance to Erosion				X	
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups			X		
Comments:	Grama and muhley grass components missing.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount				X	
Comments:	Current estimate is 40%, although the majority is annual forbs as ground cover.					
B	Annual Production				X	
Comments:	Current estimate is 450-500 lbs/ac or kg/ha.					
B	Invasive Plants		X			
Comments:	Prickly pear is common throughout along with cholla.					
B	Reproductive Capability of Perennial Plants				X	
Comments:						
S	Physical/Chemical/Biological Crusts				X	

Comments:						
B	Wildlife Habitat			X		
Comments:	Some browse species were observed; however, browse species comprise a very small portion of the vegetative community. This in turn results in a reduction in cover for mule deer. The lack of sufficient browse species as an alternate but preferred source of forage restricts this sites' potential. Forbs constitute the bulk of the dietary constituents available for both mule deer and pronghorn antelope. Because of the reduced quantities of quality forage, a moderate rating is required for wildlife habitat					
B	Wildlife Populations			X		
Comments:	Wildlife observations in this pasture would indicate that they reside in it; however, the woven wire fences in the allotment restrict the gene flow for pronghorn antelope between and among populations residing in adjacent pastures. Wildlife population data do not exist for this allotment therefore an assessment as to the status of the various species is not possible at this time					
B	Special Status Species Habitat					X
Comments:	None known to occur.					
B	Special Status Species Populations					X
Comments:	None known to occur.					
Part 3. Summary						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	7	3
H	Hydrologic	0	0	0	9	2
B	Biotic	0	1	3	5	4
B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the <i>Does not Meet</i> column, Moderate becomes <i>May Need More Info</i> , and Slight to Moderate and None to Slight merge to form the <i>Meets</i> columns. Values from the table are summarized below. Space is provided for rationale of the						

determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		1	3	9

Site Notes: This ecological site is situated in a loamy inclusion next to the Crooked Creek drainage. The productive potential is high here, but the prickly pear and cholla are beginning to encroach to the point of perhaps taking over the site. The composition if these opuntias is disproportionately higher than expected. The grama and muhley grass components are reduced and missing. Annual forbs make up most of the litter and ground cover. Burrograss and tobosa are the two grasses on site. Vegetation like the willow, walnut, sumac, condalia and other trees occupy the ravine type coulee area.

No livestock were observed at the time of assessment.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 64090-DARK CANYON-F233			
Legal Land Desc	NESW 33 0140S 0210E Meridian 23	Acreage	4018
Ecosite	070DY158NM VERY SHALLOW CP-4	Photo Taken	Y
Watershed	13060009020 MIDDLE FELIX		
Observers	NAVARRO/ARTHUN	Observation Date	07/08/2005
County Soil Survey	NM666 CHAVES SOUTH	Soil Var/Taxad	
Soil Map Unit	EcC	Soil Taxon Name	ECTOR
Texture Class	NM666 CB-L	Soil Phase	ECTOR- ROC
Texture Modifier	NM666 COBBLY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	6.87	NOAA Growing Season Precipitation	5.8
NOAA Avg Annual Precipitation	14.85	NOAA Avg Growing Season Precipitation	12.66
Disturbances and Animal Use:			

Part 2. Attributes and Indicators						
		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns					X
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground				X	
Comments:		Current estimate is 20%.				

S H	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement				X	
Comments:	The litter is holding in place.					
S H B	Soil Surface Resistance to Erosion					X
Comments:	Soil ped sample of the interspace shows virtually no melting using the soil stability test.					
S H B	Soil Surface Loss or Degradation				X	
Comments:	Some rock and pebbles have migrated towards the surface.					
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:	The rock and gravel cover is aiding in increased infiltration.					
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups				X	
Comments:	Only slight reductions exist.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount				X	
Comments:	Current estimate is 10%.					
B	Annual Production				X	
Comments:	500 lbs/ac or kg/a is the current estimate. The drainage area, "Crooked Creek" accounts for increase in production.					
B	Invasive Plants			X		
Comments:	Snakeweed is scattered.					
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts				X	

Comments:	A good physical crust exists.					
B	Wildlife Habitat			X		
Comments:	The lack of sufficient browse species as an alternate but preferred source of nutrition restricts this sites' potential. Forbs constitute the bulk of the dietary constituents available for wild ungulates. Because of the reduced quantities of available forage, a moderate rating is required for wildlife habitat.					
B	Wildlife Populations			X		
Comments:	Mule deer, barbary sheep and pronghorn antelope were the ungulates observed. Wildlife population data do not exist for this allotment therefore an assessment as to the status of the various species is not possible at this time.					
B	Special Status Species Habitat					X
Comments:	None known to occur.					
B	Special Status Species Populations					X
Comments:	None known to occur.					
Part 3. Summary						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	4	6
H	Hydrologic	0	0	0	6	5
B	Biotic	0	0	3	4	6
B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the <i>Does not Meet</i> column, Moderate becomes <i>May Need More Info</i> , and Slight to Moderate and None to Slight merge to form the <i>Meets</i> columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.						
Attribute	Rationale	Does Not Meet		May Need	Meets	

			More Info	
Soil		0	0	10
Hydrologic		0	0	11
Biotic		0	3	10
<p>Site Notes: The site includes the Crooked Creek drainage along with the upland. Vegetation like willow, sumac, condalia, walnut and other tree species inhabit the drainage. The change in vegetation is obvious when the lowland grades towards the upland shallower soil. Tobosa and burrograss dominate the transition zone eventually giving way to the grama grass and tridens component. Beargrass and yucca also can be found on the shallow upland. Prickly pear and cholla also are found in abundance.</p> <p>Muledeer, pronghorn and barbary sheep were the ungulates observed at the time of assessment. The water distribution appears to be adequate. Numerous covies of quail were observed also. No livestock are utilizing this pasture presently.</p>				

RFOs Upland and Biotic Standard Assessment Summary Worksheet						
SITE 64090-E SAMPSON-F223						
Legal Land Desc	SESE 3 0130S 0220E Meridian 23		Acreage		1770	
Ecosite	042CY025NM SHALLOW SD-3		Photo Taken		Y	
Watershed	13060007030 ZUBER					
Observers	NAVARRO/ARTHUN		Observation Date		06/17/2005	
County Soil Survey	NM666 CHAVES SOUTH		Soil Var/Taxad			
Soil Map Unit	Lt		Soil Taxon Name		LOZIER	
Texture Class	NM666 GRV-L		Soil Phase		LOZIER-TENCEE	
Texture Modifier	NM666 COBBLY LOAM					
Observed Avg Annual Precipitation			Observed Avg Growing Season Precipitation			
NOAA Annual Precipitation	6.87		NOAA Growing Season Precipitation		5.8	
NOAA Avg Annual Precipitation	14.85		NOAA Avg Growing Season Precipitation		12.66	
Disturbances and Animal Use:	No sheep observed in this pasture at the time of assessment.					
Part 2. Attributes and Indicators						
		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground				X	
Comments:	Baregoround is now estimated at 30%. Rock cover may be as mkuch as 50% in some areas.					

S H	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement				X	
Comments:						
S H B	Soil Surface Resistance to Erosion				X	
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:	Only minor affects on infiltration exist.					
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups				X	
Comments:	Prickly pear (<i>Opuntia</i> spp.), cholla (<i>Opuntia spinosa</i> .), beargrass (<i>Nolina microcarpa</i>), <i>Tridens</i> spp., croton (<i>Croton</i> spp.), catclaw (<i>Acacia</i> spp. <i>greggii</i>), blue grama (<i>Bouteloua gracilis</i>), <i>Dalea</i> spp., tobosa (<i>Pleuraphis mutica</i>), broom snakeweed (<i>Gutierrezia sarothrae</i>) century Plant (<i>Agave</i> spp.) was flowering. Also of mention were plantago and burrograss.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:	Estimation is now 20% exceeding both the long-term average and the ESD.					
B	Annual Production				X	
Comments:	Estimation is now 500 lbs/ac or kg.ha. The tobosa swales and depressional areas hold more moisture and holds more opportunity for higher production.					
B	Invasive Plants			X		
Comments:	<i>Acacia</i> spp. and snakeweed (<i>Gutierrezia sarothrae</i>) scattered.					
B	Reproductive Capability of Perennial Plants					X
Comments:						

S	Physical/Chemical/Biological Crusts				X	
Comments:	Good physical crust.					
B	Wildlife Habitat			X		
Comments:	Some browse species were observed; however, browse species comprise a very small portion of the vegetative community. This in turn results in a reduction in cover for mule deer. Forbs constitute the bulk of the dietary constituents available for both mule deer and pronghorn antelope. Because of the reduced quantities of available forage, a moderate rating is required for wildlife habita					
B	Wildlife Populations				X	
Comments:	Collared lizard (Crotaphytus collaris) were observed as were numerous passerine birds, turkey vultures (Cathartes aura) , and lagomorphs. Pronghorn antelope (Antilocapra americana) and mule deer (Odocoileus hemionus) inhabit this pasture. Wildlife population data do not exist for this allotment therefore an assessment as to the status of the various species is not possible at this time.					
B	Special Status Species Habitat					X
Comments:	None known to occur.					
B	Special Status Species Populations					X
Comments:	None known to occur.					
Part 3. Summary						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	6	4
H	Hydrologic	0	0	0	7	4
B	Biotic	0	0	2	5	6
B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the <i>Does not Meet</i> column, Moderate becomes <i>May Need More Info</i> , and Slight to Moderate and None to Slight merge to form the <i>Meets</i> columns. Values from the table are summarized below. Space is provided for rationale of the						

determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		0	2	11

Site Notes: Tobosa flat comprised approximately 30% of site. Thistle was observed. Very little mesquite. Century Plant (Agave spp.) was flowering in adjacent areas. No sheep were observed in this pasture at the time of assessment.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 64090-E TWIN BUTTE-F229			
Legal Land Desc	SENE 36 0130S 0210E Meridian 23	Acreage	1813
Ecosite	070DY158NM VERY SHALLOW CP-4	Photo Taken	Y
Watershed	13060009040 FELIX		
Observers	ARTHUN/MCGEE	Observation Date	06/21/2005
County Soil Survey	NM666 CHAVES SOUTH	Soil Var/Taxad	
Soil Map Unit	EcC	Soil Taxon Name	ECTOR
Texture Class	NM666 CB-L	Soil Phase	ECTOR- ROC
Texture Modifier	NM666 COBBLY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	6.87	NOAA Growing Season Precipitation	5.8
NOAA Avg Annual Precipitation	14.85	NOAA Avg Growing Season Precipitation	12.66
Disturbances and Animal Use:			

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground				X	
Comments:	Present estimate is 30%. Long-term average for rock cover is 72%.					
S H	Gullies				X	

Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas				X	
Comments:						
H	Litter Movement				X	
Comments:						
S H B	Soil Surface Resistance to Erosion					X
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups				X	
Comments:	Some reduction in F/S groups.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount				X	
Comments:	Annual forbs make up the majority of litter.					
B	Annual Production				X	
Comments:	Approximately 60% of potential.					
B	Invasive Plants		X			
Comments:	Snakeweed is common					
B	Reproductive Capability of Perennial Plants				X	
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:	Physical crusting evident.					
B	Wildlife Habitat			X		
Comments:	Some browse species were observed; however, browse species comprise a					

	very small portion of the vegetative community. This in turn results in a reduction in cover for mule deer. Forbs constitute the bulk of the dietary constituents available for both mule deer and pronghorn antelope. Because of the reduced quantities of available forage, a moderate rating is required for wildlife habitat					
B	Wildlife Populations				X	
Comments:	<p>Pronghorn antelope (<i>Antilocapra americana</i>) and mule deer (<i>Odocoileus hemionus</i>) and jackrabbits were observed as were various passerine birds and raptors. Wildlife observations in this pasture would indicate that they reside in it; however, the woven wire fences in the allotment restrict the gene flow for pronghorn antelope between and among populations residing in adjacent pastures. While evidence of reproduction of mule deer and pronghorn antelope have been observed, it is not known at what rate or if those young will be recruited into the adult populations.</p> <p>Wildlife population data do not exist for this allotment therefore an assessment as to the status of the various species is not possible at this time.</p>					
B	Special Status Species Habitat					X
Comments:	None known to occur.					
B	Special Status Species Populations					X
Comments:	None known to occur.					
Part 3. Summary						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	7	3
H	Hydrologic	0	0	0	8	3
B	Biotic	0	1	1	6	5
B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the <i>Does not Meet</i> column, Moderate becomes <i>May Need More Info</i> , and Slight to Moderate and None to Slight merge to form the <i>Meets</i> columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the						

ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		1	1	11

Site Notes: This is a typical shallow site with desert shrub vegetation. Beargrass, threeawn, snakeweed, yucca and prickly pear are dominant. A population of thistle exists on the road and deeper depressional areas adjacent to the immediate study area. Annual forbs have dried up and are making way for perennial warm season plants. Site is located in a State section.

RFOs Upland and Biotic Standard Assessment Summary Worksheet						
SITE 64090-EAST TURNER-F232						
Legal Land Desc	NENE 25 0140S 0210E Meridian 23		Acreage		2430	
Ecosite	070DY158NM VERY SHALLOW CP-4		Photo Taken		Y	
Watershed	13060009020 MIDDLE FELIX					
Observers	NAVARRO/ARTHUN/JAQUEZ		Observation Date		06/03/2005	
County Soil Survey	NM666 CHAVES SOUTH		Soil Var/Taxad			
Soil Map Unit	EcC		Soil Taxon Name		ECTOR	
Texture Class	NM666 CB-L		Soil Phase		ECTOR-ROC	
Texture Modifier	NM666 COBBLY LOAM					
Observed Avg Annual Precipitation			Observed Avg Growing Season Precipitation			
NOAA Annual Precipitation	6.87		NOAA Growing Season Precipitation		5.8	
NOAA Avg Annual Precipitation	14.85		NOAA Avg Growing Season Precipitation		12.66	
Disturbances and Animal Use:	Livestock on this site is primarily sheep. Evidence of porcupine use on the acacia as per conversation with Wildlife Biologist.					
Part 2. Attributes and Indicators						
		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:	There are numerous water flow patterns. Evidence of a violent thunderstorm exists where rain flow was excessive.					
S H	Pedestals and/or Terracettes				X	

Comments:						
S H	Bare Ground				X	
Comments:	Small and large rock is the majority of ground cover.					
S H	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement			X		
Comments:	Litter is piled up against obstructions.					
S H B	Soil Surface Resistance to Erosion					X
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff			X		
Comments:	Infiltration is affected by changes in plant cover. Obvious runoff exists.					
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups			X		
Comments:	Absence of grama grass.					
B	Plant Mortality/Decadence				X	
Comments:	Numerous acacia is dead and dying due to use by rodents.					
H B	Litter Amount				X	
Comments:						
B	Annual Production				X	
Comments:						
B	Invasive Plants			X		
Comments:	Snakeweed and acacia scattered.					
B	Reproductive Capability of Perennial Plants				X	
Comments:	Slight limitations exist.					
S	Physical/Chemical/Biological				X	

	Crusts					
Comments:	Physical crusts exist.					
B	Wildlife Habitat			X		
Comments:	Some browse species were observed; however, browse species comprise a very small portion of the vegetative community. This in turn results in a reduction in cover for mule deer. Forbs constitute the bulk of the dietary constituents available for both mule deer and pronghorn antelope. Because of the reduced quantities of available forage, a moderate rating is required for wildlife habitat					
B	Wildlife Populations			X		
Comments:	<p>Pronghorn antelope (<i>Antilocapra americana</i>), mule deer (<i>Odocoileus hemionus</i>) and jackrabbits were observed as were various passerine birds and raptors. Wildlife observations in this pasture would indicate that they reside in it; however, the woven wire fences in the allotment restrict the gene flow for pronghorn antelope between and among populations residing in adjacent pastures. While evidence of reproduction of mule deer and pronghorn antelope have been observed, it is not known at what rate or if those young will be recruited into the adult populations.</p> <p>Wildlife population data do not exist for this allotment therefore an assessment as to the status of the various species is not possible at this time</p>					
B	Special Status Species Habitat					X
Comments:	None known to occur.					
B	Special Status Species Populations					X
Comments:	None known to occur.					
Part 3. Summary						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	5	5
H	Hydrologic	0	0	2	5	4
B	Biotic	0	0	4	5	4

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	2	9
Biotic		0	4	9

Site Notes: Sheep are utilizing this pasture. There is an obvious indication that water flow has reached some areas and carried along with it litter and other materials. Infiltration may have been compromised. As per conversation with Wildlife Biologist; there appears to be porcupine use on the cambium layer of the acacia. Numerous acacia is either dead, decadent or dying. The gnawing activity on these shrubs suggests porcupine use.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 64090-FELIX-F239			
Legal Land Desc	NENE 34 0140S 0220E Meridian 23	Acreage	2002
Ecosite	042CY007NM LOAMY SD-3	Photo Taken	Y
Watershed	13060009040 FELIX		
Observers	NAVARRO/ARTHUN	Observation Date	06/23/2005
County Soil Survey	NM666 CHAVES SOUTH	Soil Var/Taxad	
Soil Map Unit	BP	Soil Taxon Name	BIGETTY
Texture Class	NM666 L	Soil Phase	BIGETTY-PECOS
Texture Modifier	NM666 LOAM,SILT LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	6.87	NOAA Growing Season Precipitation	5.8
NOAA Avg Annual Precipitation	14.85	NOAA Avg Growing Season Precipitation	12.66
Disturbances and Animal Use:	Cattle are in this pasture at the moment. Some trailing observed to and from the drainage of the Rio Felix.		

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments: Some elevated tobosa.						
S H	Bare Ground				X	

Comments:	Estimation is currently 20-30%.					
S H	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement				X	
Comments:	Some displacement.					
S H B	Soil Surface Resistance to Erosion					X
Comments:	Soil ped sample of the interspace is holding intact; organic matter content is sufficient.					
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups			X		
Comments:	Reduction in grama grass component.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount				X	
Comments:	Majority of litter is now annual forbs (filaree) which have now dried up and are making way for perennials.					
B	Annual Production				X	
Comments:	Current estimate is 450 lbs/ac or kg/ha.					
B	Invasive Plants				X	
Comments:	Cholla, snakeweed, and prickly pear less than scattered.					
B	Reproductive Capability of Perennial Plants				X	
Comments:						
S	Physical/Chemical/Biological					X

	Crusts					
Comments:	Fairly uniform.					
B	Wildlife Habitat			X		
Comments:	Browse species were observed; however, browse species comprise a small portion of the vegetative community. This in turn results in a some reduction in cover for mule deer. The lack of sufficient browse species as an alternate but preferred source of forage restricts this sites' potential. Forbs constitute the bulk of the dietary constituents available for both mule deer and pronghorn antelope. Because of the reduced quantities of available forage, a moderate rating is required for wildlife habita					
B	Wildlife Populations			X		
Comments:	<p>Some burrowing activity by rodents is present. Pronghorn antelope (<i>Antilocapra americana</i>), mule deer (<i>Odocoileus hemionus</i>) and jackrabbits were observed as were various passerine birds and raptors. Wildlife observations in this pasture would indicate that they reside in it; however, the woven wire fences in the allotment restrict the gene flow for pronghorn antelope between and among populations residing in adjacent pastures.</p> <p>Wildlife population data do not exist for this allotment therefore an assessment as to the status of the various species is not possible at this time.</p>					
B	Special Status Species Habitat					X
Comments:	None known to occur.					
B	Special Status Species Populations					X
Comments:	None known to occur.					
Part 3. Summary						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	4	6
H	Hydrologic	0	0	0	7	4
B	Biotic	0	0	3	5	5
B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the						

table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		0	3	10

Site Notes: The site evaluated appears to be on a transitional bench between the Rio Felix and the upland just to the north. The two-track leading into the site dissects the the coulee and upland. Vegetation like desert willow, sumac, condalia, alkali sacaton and walnut are plentiful here. Muledeer inhabit this site and use the psuedo-riparian vegetation in the coulee for cover and browse. Burrowing rodents and lagomorphs also utilize the both areas. Livestock in the form of cattle are in this area and there is some trailing through the site and drainage also.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 64090-HORSESHOE-F234			
Legal Land Desc	SWNW 1 0150S 0210E Meridian 23	Acreage	2082
Ecosite	070DY158NM VERY SHALLOW CP-4	Photo Taken	Y
Watershed	13060009020 MIDDLE FELIX		
Observers	NAVARRO/ARTHUN	Observation Date	07/08/2005
County Soil Survey	NM666 CHAVES SOUTH	Soil Var/Taxad	
Soil Map Unit	EcC	Soil Taxon Name	ECTOR
Texture Class	NM666 CB-L	Soil Phase	ECTOR- ROC
Texture Modifier	NM666 COBBLY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	6.87	NOAA Growing Season Precipitation	5.8
NOAA Avg Annual Precipitation	14.85	NOAA Avg Growing Season Precipitation	12.66
Disturbances and Animal Use:	No livestock observed presently.		

Part 2. Attributes and Indicators						
		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:		Increased slope but water flow if present is minimal.				
S H	Pedestals and/or Terracettes				X	
Comments:		Slope in excess of 10%.				
S H	Bare Ground				X	
Comments:		Current estimate is 20% with the remainder of ground cover made up of				

	mostly rock and gravel.					
S H	Gullies				X	
Comments:	The drainage has minimal gullying with vegetation like alkali sacaton and tobosa stabilizing the banks.					
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement					X
Comments:						
S H B	Soil Surface Resistance to Erosion				X	
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:	The rock cover is stabilizing the site and aiding in infiltration.					
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups				X	
Comments:	Only minor reductions exist.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount				X	
Comments:	Is within the range expected at 5%.					
B	Annual Production				X	
Comments:	The current estimate is 500 lbs/ac or kg/ha. This takes into account the drainage area also which is higher in production.					
B	Invasive Plants		X			
Comments:	Snakeweed and cholla are common.					
B	Reproductive Capability of Perennial Plants				X	
Comments:						
S	Physical/Chemical/Biological				X	

	Crusts					
Comments:	A physical crust is holding the soil in place where it is not broken by rock cover.					
B	Wildlife Habitat				X	
Comments:	<p>Mule deer (<i>Odocoileus hemionus</i>) and pronghorn antelope (<i>Antilocapra americana</i>) sign in the bottoms suggests these species utilize those areas for food and cover. Numerous coveys of scaled quail (<i>Callipepla squamata</i>) with fledglings were observed.</p> <p>Snakeweed, prickly pear and cholla dominate the uplands. Skunkbush, javelinabush, desert willow (<i>Salix exigua</i>) and walnut (<i>Juglans</i> spp.) dominate the drainage. Giant sacaton (<i>Sporobolus gigantea</i>), tobosa and burrograss (<i>Scleropogon brevifolius</i>) are grasses found in the bottoms. Wolf tail (<i>Lycurus phleoides</i>) and black grama are the major upland grasses. This mix of vegetation types suggest that this pasture may be more amenable for supporting diverse wildlife populations than other pastures in the allotment thus a rating of Slight to Moderate is appropriate.</p>					
B	Wildlife Populations				X	
Comments:	<p>Pronghorn antelope (<i>Antilocapra americana</i>), mule deer (<i>Odocoileus hemionus</i>) sign, scaled quail (<i>Callipepla squamata</i>) and jackrabbits were observed. Wildlife observations in this pasture would indicate that they reside in it; however, the woven wire fences in the allotment restrict the gene flow for pronghorn antelope between and among populations residing in adjacent pastures. While evidence of reproduction of scaled quail (<i>Callipepla squamata</i>) it is not known at what rate or if those young will be recruited into the adult populations.</p> <p>Wildlife population data do not exist for this allotment therefore an assessment as to the status of the various species is not possible at this time</p>					
B	Special Status Species Habitat					X
Comments:	None known to occur.					
B	Special Status Species Populations					X
Comments:	None known to occur.					
Part 3. Summary						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	7	3
H	Hydrologic	0	0	0	8	3
B	Biotic	0	1	0	8	4

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		1	0	12

Site Notes: This site includes both a very shallow and drainage area with loamy soil. Vegetation such as condalia, walnut, willow, sumac and alkali sacaton dominate the coulee which is dry at the moment. The type of vegetation that comprises the upland is snakeweed, black and blue grama, yucca, croton, tridens and beargrass. The snakeweed component is quite common throughout on the upland. The cover and browse for muledeer and pronghorn is within the drainage. There is a distinct zone between upland and lowland with change in elevation, soil and vegetation type. No livestock were observed at the time of assessment.

Numerous covies of quail were observed with fledglings in abundance.

RFOs Upland and Biotic Standard Assessment Summary Worksheet						
SITE 64090-INDIAN BLUFF-F238						
Legal Land Desc	SESW 28 0140S 0220E Meridian 23		Acreage	435		
Ecosite	042CY025NM SHALLOW SD-3		Photo Taken	Y		
Watershed	13060009020 MIDDLE FELIX					
Observers	NAVARRO/ARTHUN		Observation Date	06/16/2005		
County Soil Survey	NM666 CHAVES SOUTH		Soil Var/Taxad			
Soil Map Unit	Lt		Soil Taxon Name	LOZIER		
Texture Class	NM666 GRV-L		Soil Phase	LOZIER-TENCEE		
Texture Modifier	NM666 COBBLY LOAM					
Observed Avg Annual Precipitation			Observed Avg Growing Season Precipitation			
NOAA Annual Precipitation	6.87		NOAA Growing Season Precipitation	5.8		
NOAA Avg Annual Precipitation	14.98		NOAA Avg Growing Season Precipitation	12.8		
Disturbances and Animal Use:	Sheep are the primary class of livestock utilizing this pasture.					
Part 2. Attributes and Indicators						
		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground				X	

Comments:	Estimation is now at 50%. Small rock and pebbles make up some of the ground cover; long-term average is approx. 20%.					
S H	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement			X		
Comments:	Litter is up against obstructions.					
S H B	Soil Surface Resistance to Erosion				X	
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:	Some horizon loss has occurred as a natural process..					
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:	Only minor effects on infiltration.					
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups			X		
Comments:	Absence of grama and dropseed is observed.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount				X	
Comments:	Litter is made up mainly of cool season annual forbs which have now dried and making way for warm season perennials.					
B	Annual Production				X	
Comments:	Slightly above long-term average but below the ESD for normal years.					
B	Invasive Plants		X			
Comments:	Snakeweed is scattered with creosote common throughout. Less occurrence of beargrass and cholla.					
B	Reproductive Capability of Perennial Plants				X	
Comments:	Reproductive tiller formation is slightly limited.					

S	Physical/Chemical/Biological Crusts				X	
Comments:	A weak physical crust exists with some breaks in continuity.					
B	Wildlife Habitat			X		
Comments:	Mule deer and lagomorphs observed. Some browse species were found in the drainages; however, desirable browse species are being replaced by invasives in the vegetative community. This in turn results in a reduction in cover and forage for mule deer. Forbs constitute the bulk of the dietary constituents available for both mule deer and pronghorn antelope. Because of the reduced quantities of available forage, a moderate rating is required for wildlife habitat					
B	Wildlife Populations			X		
Comments:	Wildlife observations in this pasture would indicate that they reside in it; however, the woven wire fences in the allotment restrict the gene flow for pronghorn antelope between and among populations residing in adjacent pastures. Wildlife population data do not exist for this allotment therefore an assessment as to the status of the various species is not possible at this time					
B	Special Status Species Habitat					X
Comments:	None known to occur.					
B	Special Status Species Populations					X
Comments:	None known to occur.					
Part 3. Summary						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	6	4
H	Hydrologic	0	0	1	7	3
B	Biotic	0	1	3	5	4
B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the <i>Does not Meet</i> column, Moderate becomes <i>May Need</i>						

More Info, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	1	10
Biotic		1	3	9

Site Notes: This upland site has a predominance of creosote and other shrubs such as acacia and beargrass. Overlooking drainages with condalia and sumac, this area may provide some habitat for deer and pronghorn. Sheep are utilizing some areas of this pasture. With the sparse vegetation, perhaps vegetative treatment for creosote may need to be evaluated prior.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 64090-N WELL-CAMP-F227			
Legal Land Desc	NWNW 8 0130S 0220E Meridian 23	Acreage	3288
Ecosite	070DY158NM VERY SHALLOW CP-4	Photo Taken	Y
Watershed	13060007030 ZUBER		
Observers	NAVARRO/ARTHUN	Observation Date	06/17/2005
County Soil Survey	NM666 CHAVES SOUTH	Soil Var/Taxad	
Soil Map Unit	EcC	Soil Taxon Name	ECTOR
Texture Class	NM666 CB-L	Soil Phase	ECTOR- ROC
Texture Modifier	NM666 COBBLY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	6.87	NOAA Growing Season Precipitation	5.8
NOAA Avg Annual Precipitation	14.85	NOAA Avg Growing Season Precipitation	12.66
Disturbances and Animal Use:	Sheep are observed at the bottom of the drainage with muledeer in the drainage itself.		

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground				X	
Comments:		Estimation is now 25%. The rock cover is 44% for the long-term average.				
S H	Gullies					X

Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement				X	
Comments:						
S H B	Soil Surface Resistance to Erosion			X		
Comments:	The soil stability test indicates rather rapid melting of the interspace soil ped sample.					
S H B	Soil Surface Loss or Degradation				X	
Comments:	Some horizon loss has occurred.					
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff			X		
Comments:	Plant cover changes have negatively affected infiltration. Runoff is more evident and not necessarily on the slope.					
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups			X		
Comments:	Aristida spp., cholla (Opuntia spp.), Tridens spp. muticus, beargrass (Nolina microcarpa), broom snakeweed (Gutierrezia sarothrae), Acacia spp., tobosa (Hilaria mutica), Bouteloua gracilis. The grass species have been reduced.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:	Estimate is now 45%. Annual forbs account for the higher percent litter (we experienced a wet spring).					
B	Annual Production				X	
Comments:	Estimation is now 300 lbs/ac or kg/ha. Approximately 60% of the long-term average and half of the ESD for normal years.					
B	Invasive Plants		X			
Comments:	Snakeweed is common and affecting the infiltration and composition.					
B	Reproductive Capability of Perennial Plants				X	
Comments:						

S	Physical/Chemical/Biological Crusts			X		
Comments:	A weak physical crust exists and is a very minor component in the interspaces; not necessarily in protected areas.					
B	Wildlife Habitat			X		
Comments:	Some browse species observed in the drainages were condalia and rhus; however, browse species comprise a very small portion of the vegetative community. This in turn results in a reduction in cover for mule deer. Forbs constitute the bulk of the dietary constituents available for both mule deer and pronghorn antelope. Because of the reduced quantities of available forage, a moderate rating is required for wildlife habitat					
B	Wildlife Populations			X		
Comments:	<p>Pronghorn antelope (<i>Antilocapra americana</i>), mule deer (<i>Odocoileus hemionus</i>) and jackrabbits were observed as were various passerine birds and raptors. Wildlife observations in this pasture would indicate that they reside in it; however, the woven wire fences in the allotment restrict the gene flow for pronghorn antelope between and among populations residing in adjacent pastures. While evidence of reproduction of mule deer and pronghorn antelope were observed, it is not known at what rate or if those young will be recruited into the adult populations.</p> <p>Wildlife population data do not exist for this allotment therefore an assessment as to the status of the various species is not possible at this time</p>					
B	Special Status Species Habitat					X
Comments:	None known to occur.					
B	Special Status Species Populations					X
Comments:	None known to occur.					
Part 3. Summary						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	2	4	4
H	Hydrologic	0	0	2	5	4

B	Biotic	0	1	4	3	5
<p>B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the <i>Does not Meet</i> column, Moderate becomes <i>May Need More Info</i>, and Slight to Moderate and None to Slight merge to form the <i>Meets</i> columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.</p>						
Attribute	Rationale	Does Not Meet	May Need More Info	Meets		
Soil		0	2	8		
Hydrologic		0	2	9		
Biotic		1	4	8		
<p>Site Notes: Mule deer observed in the drainages leading into the study aea. Sheep are utilizing this pasture. Jackrabbits are in abundance. Snakeweed is common throughout and because of the slopes occurring, this may compromise the site's potential to prevent erosion. Weak crusting and rapid melting of the interspace soil sample points out a note of caution. The ground cover remains 40% rock and bareground respectively although annual forbs have flourished earlier in the year. Thistle can be found at the bottom of the drainage and along the road.</p>						

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 64090-S WELL CAMP-F228			
Legal Land Desc	NENW 25 0130S 0210E Meridian 23	Acreage	2163
Ecosite	070DY158NM VERY SHALLOW CP-4	Photo Taken	Y
Watershed	13060009040 FELIX		
Observers	NAVARRO/MCGEE	Observation Date	06/10/2005
County Soil Survey	NM666 CHAVES SOUTH	Soil Var/Taxad	
Soil Map Unit	EcC	Soil Taxon Name	ECTOR
Texture Class	NM666 CB-L	Soil Phase	ECTOR- ROC
Texture Modifier	NM666 COBBLY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	6.87	NOAA Growing Season Precipitation	5.8
NOAA Avg Annual Precipitation	14.85	NOAA Avg Growing Season Precipitation	12.66
Disturbances and Animal Use:	Sheep are utilizing this pasture. Ranch roads are numerous leading into watering points.		

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground				X	
Comments:		The majority of ground cover is rock.				
S H	Gullies				X	

Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement				X	
Comments:						
S H B	Soil Surface Resistance to Erosion				X	
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:	Only minor effects on infiltration.					
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups			X		
Comments:	Absence of grama grasses.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount				X	
Comments:						
B	Annual Production			X		
Comments:	150 lbs/ac or kg/ha is the current estimate.					
B	Invasive Plants		X			
Comments:	Snakeweed is common throughout and dominates some hillsides.					
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:	Physical crusts observed.					
B	Wildlife Habitat			X		
Comments:	Some browse species were observed; however, browse species appear to be					

	increasing in the vegetative community. This in turn results in an increase in cover for mule deer. The lack of sufficient desirable browse species as an alternate but preferred source of nutrition restricts this site's potential. Forbs continue to constitute the bulk of the dietary constituents available for wild ungulates. Because of the reduced quantities of available quality forage, a moderate rating is required for wildlife habitat.					
B	Wildlife Populations			X		
Comments:	<p>Muledeer (<i>Odocoileus hemionus</i>) and jackrabbits (<i>Lepus californicus</i>) were observed as were various passerine birds and raptors. Wildlife observations in this pasture would indicate that they reside in it; however, the woven wire fences in the allotment restrict the gene flow for pronghorn antelope between and among populations residing in adjacent pastures.</p> <p>Wildlife population data do not exist for this allotment therefore an assessment as to the status of the various species is not possible at this time</p>					
B	Special Status Species Habitat					X
Comments:	None known to occur.					
B	Special Status Species Populations					X
Comments:	None known to occur.					
Part 3. Summary						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	7	3
H	Hydrologic	0	0	0	9	2
B	Biotic	0	1	4	3	5
B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the <i>Does not Meet</i> column, Moderate becomes <i>May Need More Info</i> , and Slight to Moderate and None to Slight merge to form the <i>Meets</i> columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final						

agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		1	4	8

Site Notes: Ground cover is mostly rock at present. There is an obvious absence of grama grass but the shrubs like nolina, acacia, prickly pear and cholla are abundant. Snakeweed is common throughout and has the potential to dominate. Some forbs are seen like croton and globemallow. Sheep are utilizing this pasture. Gully formation is starting on the two-track leading into this site, but is slope dependent here.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 64090-SIXTEEN-F235			
Legal Land Desc	NENE 20 0140S 0220E Meridian 23	Acreage	3891
Ecosite	042CY025NM SHALLOW SD-3	Photo Taken	Y
Watershed	13060009040 FELIX		
Observers	ARTHUN/MCGEE	Observation Date	06/21/2005
County Soil Survey	NM666 CHAVES SOUTH	Soil Var/Taxad	
Soil Map Unit	EcD	Soil Taxon Name	ECTOR
Texture Class	NM666 CB-L	Soil Phase	ECTOR- ROC
Texture Modifier	NM666 COBBLY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	6.87	NOAA Growing Season Precipitation	5.8
NOAA Avg Annual Precipitation	14.85	NOAA Avg Growing Season Precipitation	12.66
Disturbances and Animal Use:			

Part 2. Attributes and Indicators						
		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground				X	
Comments:		Estimate is now 30-40%. Long-term average is 60% for rock cover.				

S H	Gullies				X	
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas				X	
Comments:						
H	Litter Movement				X	
Comments:						
S H B	Soil Surface Resistance to Erosion					X
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups			X		
Comments:	Only minor reductions but the absence of grama grass is apparent.					
B	Plant Mortality/Decadence				X	
Comments:						
H B	Litter Amount				X	
Comments:	Estimate is now 10%.					
B	Annual Production				X	
Comments:	Current estimate is 300 lbs/ac or kg/ha.					
B	Invasive Plants		X			
Comments:	Snakeweed common.					
B	Reproductive Capability of Perennial Plants				X	
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:	Physical crusts observed.					
B	Wildlife Habitat			X		

Comments:	The lack of sufficient browse species as an alternate but preferred source of nutrition restricts this sites' potential. Forbs constitute the bulk of the dietary constituents available for wild ungulates. Because of the reduced quantities of available forage, a moderate rating is required for wildlife habitat.					
B	Wildlife Populations			X		
Comments:	Wildlife observations in this pasture would indicate that they reside in it; however, the woven wire fences in the allotment restrict the gene flow for pronghorn antelope between and among populations residing in adjacent pastures. Wildlife population data do not exist for this allotment therefore an assessment as to the status of the various species is not possible at this time.					
B	Special Status Species Habitat					X
Comments:	None known to occur.					
B	Special Status Species Populations					X
Comments:	None known to occur.					
Part 3. Summary						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	7	3
H	Hydrologic	0	0	0	8	3
B	Biotic	0	1	3	5	4
B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the <i>Does not Meet</i> column, Moderate becomes <i>May Need More Info</i> , and Slight to Moderate and None to Slight merge to form the <i>Meets</i> columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.						

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		1	3	9
Site Notes: Snakweed, creosote, acacia and agave are the shrubs observed. This upland site has an obvious absence of grammas.				

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 64090-SOUTH TURNER-F236			
Legal Land Desc	NWNE 26 0140S 0210E Meridian 23	Acreage	3436
Ecosite	070DY151NM LIMESTONE HILLS CP	Photo Taken	Y
Watershed	13060009020 MIDDLE FELIX		
Observers	NAVARRO/ARTHUN	Observation Date	06/23/2005
County Soil Survey	NM666 CHAVES SOUTH	Soil Var/Taxad	
Soil Map Unit	EcD	Soil Taxon Name	ECTOR
Texture Class	NM666 CB-L	Soil Phase	ECTOR- ROC
Texture Modifier	NM666 COBBLY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	6.87	NOAA Growing Season Precipitation	5.8
NOAA Avg Annual Precipitation	14.85	NOAA Avg Growing Season Precipitation	12.66
Disturbances and Animal Use:	Sheep are using this pasture and there appears to be 3 extra two-track roads leading into the site. Some traffic by hunters and ranch personnel.		

Part 2. Attributes and Indicators						
		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	

Comments:						
S H	Bare Ground			X		
Comments:	20-30% is the present estimate. Long-term average for rock cover is 61%.					
S H	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement					X
Comments:						
S H B	Soil Surface Resistance to Erosion					X
Comments:	Organic matter content is sufficient. Soil ped on the interspace is holding together.					
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:	Only minor effects. Rock and gravel size cover is retaining moisture to aid the site in infiltration.					
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups			X		
Comments:	Some groups reduced. Sprangletop and bluegrama missing. Black grama is present however.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount				X	
Comments:	Current estimate is 10-20%.					
B	Annual Production			X		
Comments:	Current estimate is 350 lbs/ac or kg/ha.					
B	Invasive Plants			X		
Comments:	Snakeweed is scattered.					
B	Reproductive Capability of					X

	Perennial Plants					
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:	Physical crusts observed.					
B	Wildlife Habitat			X		
Comments:	Some browse species were observed; however, browse species comprise a very small portion of the vegetative community. This in turn results in a reduction in cover for mule deer. The lack of sufficient browse species as an alternate but preferred source of forage restricts this sites' potential. Forbs constitute the bulk of the dietary constituents available for wild ungulates. Because of the reduced quantities of quality forage, a moderate rating is required for wildlife habita					
B	Wildlife Populations			X		
Comments:	Wildlife observations in this pasture would indicate that they reside in it; however, the woven wire fences in the allotment restrict the gene flow for pronghorn antelope between and among populations residing in adjacent pastures. Wildlife population data do not exist for this allotment therefore an assessment as to the status of the various species is not possible at this time.					
B	Special Status Species Habitat					X
Comments:	None known to occur.					
B	Special Status Species Populations					X
Comments:	None known to occur.					
Part 3. Summary						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	1	4	5
H	Hydrologic	0	0	1	5	5
B	Biotic	0	0	5	2	6

<p>B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the <i>Does not Meet</i> column, Moderate becomes <i>May Need More Info</i>, and Slight to Moderate and None to Slight merge to form the <i>Meets</i> columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.</p>				
Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	1	9
Hydrologic		0	1	10
Biotic		0	5	8
<p>Site Notes: Upland site on limestone hills is currently grazed by sheep. Plenty of rock cover to aid in infiltration and water holding capacity. Desert shrub vegetation is dominant. mariola is found along with acacia. Black grama in cage is in better condition than outside.</p>				

RFOs Upland and Biotic Standard Assessment Summary Worksheet						
SITE 64090-W SAMPSON-F224						
Legal Land Desc	NWSW 9 0130S 0220E Meridian 23		Acreage		2413	
Ecosite	070DY158NM VERY SHALLOW CP-4		Photo Taken		Y	
Watershed	13060007030 ZUBER					
Observers	NAVARRO/ARTHUN		Observation Date		06/17/2005	
County Soil Survey	NM666 CHAVES SOUTH		Soil Var/Taxad			
Soil Map Unit	EcC		Soil Taxon Name		ECTOR	
Texture Class	NM666 CB-L		Soil Phase		ECTOR-ROC	
Texture Modifier	NM666 COBBLY LOAM					
Observed Avg Annual Precipitation			Observed Avg Growing Season Precipitation			
NOAA Annual Precipitation	6.87		NOAA Growing Season Precipitation		5.8	
NOAA Avg Annual Precipitation	14.85		NOAA Avg Growing Season Precipitation		12.66	
Disturbances and Animal Use:						
Part 2. Attributes and Indicators						
		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground				X	
Comments:	Estimation is now 20%. Rock cover is close to 60% for the long-term average.					

S H	Gullies				X	
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement				X	
Comments:						
S H B	Soil Surface Resistance to Erosion			X		
Comments:	Rather rapid melting of the interspace soil sample.					
S H B	Soil Surface Loss or Degradation			X		
Comments:	Horizon loss has occurred. Organic matter content is reduced.					
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups			X		
Comments:	Croton (Croton spp.), Acacia spp., broom snakeweed (Gutierrezia sarothrae), Tridens spp., Aristida spp., prickly pear (Opuntia spp.), buckwheat (Eriogonum annuum), Dalea spp., Yucca, annual forbs. An obvious absence of grama grass is apparent.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:	Estimation is now 20%.					
B	Annual Production				X	
Comments:	Estimation is now 300 lbs/ac or kg/ha counting all current leaf and tiller growth of shrubs and grasses alike.					
B	Invasive Plants			X		
Comments:	Acacia, cholla, snakeweed scattered.					
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological				X	

	Crusts					
Comments:	Weak physical crust, not continuous; rock is protecting soil and assisting with infiltration and retention.					
B	Wildlife Habitat			X		
Comments:	<p>Some browse species were observed; however, browse species comprise a small portion of the vegetative community. This in turn results in a reduction in cover for mule deer. Forbs constitute the bulk of the dietary constituents available for both mule deer and pronghorn antelope. Because of the reduced quantities of available forage, a moderate rating is required for wildlife habitat</p> <p>Pronghorn antelope (<i>Antilocapra americana</i>), mule deer (<i>Odocoileus hemionus</i>) and jackrabbits (<i>Lepus californicus</i>) were observed as were various passerine birds and raptors. Wildlife observations in this pasture indicate that they reside in it; however, the woven wire fences in the allotment restrict the gene flow for pronghorn antelope between and among populations residing in adjacent pastures. While evidence of reproduction of mule deer and pronghorn antelope have been observed, it is not known at what rate or if those young will be recruited into the adult populations.</p>					
B	Wildlife Populations			X		
Comments:	<p>Pronghorn antelope (<i>Antilocapra americana</i>), mule deer (<i>Odocoileus hemionus</i>) and jackrabbits (<i>Lepus californicus</i>) were observed as were various passerine birds and raptors. Wildlife observations in this pasture indicate that they reside in it; however, the woven wire fences in the allotment restrict the gene flow for pronghorn antelope between and among populations residing in adjacent pastures. While evidence of reproduction of mule deer and pronghorn antelope have been observed, it is not known at what rate or if those young will be recruited into the adult populations.</p> <p>Wildlife population data do not exist for this allotment therefore an assessment as to the status of the various species is not possible at this time.</p>					
B	Special Status Species Habitat					X
Comments:	None known to occur.					
B	Special Status Species Populations					X
Comments:	None known to occur.					
Part 3. Summary						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	2	5	3
H	Hydrologic	0	0	2	6	3
B	Biotic	0	0	6	1	6

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	2	8
Hydrologic		0	2	9
Biotic		0	6	7

Site Notes: High litter was the result of annual fobs; although it appeared annual forb production was reduced, however, forbs were not being replaced by Acacia spp. and Yucca. Very rocky site with reduction in perennial grass.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 64090-W TWIN BUTTE-F230			
Legal Land Desc	SENW 2 0140S 0210E Meridian 23	Acreage	1382
Ecosite	042CY007NM LOAMY SD-3	Photo Taken	Y
Watershed	13060009030 TWIN BUTTE		
Observers	NAVARRO/ARTHUN/JAQUEZ	Observation Date	06/03/2005
County Soil Survey	NM666 CHAVES SOUTH	Soil Var/Taxad	
Soil Map Unit	RH	Soil Taxon Name	REAKOR
Texture Class	NM666 L	Soil Phase	REAKOR-PECOS
Texture Modifier	NM666 LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	6.87	NOAA Growing Season Precipitation	5.8
NOAA Avg Annual Precipitation	14.85	NOAA Avg Growing Season Precipitation	12.66
Disturbances and Animal Use:	Livestock on this site is primarily sheep.		

Part 2. Attributes and Indicators						
		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground				X	

Comments:	Estimate is currently 40%.					
S H	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement				X	
Comments:						
S H B	Soil Surface Resistance to Erosion				X	
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups			X		
Comments:	Absence of grama grasses. The primary vegetation is tobosa, cholla and annual forbs which are now drying up. Snakeweed is common on the upland just east of the immediate location.					
B	Plant Mortality/Decadence				X	
Comments:	Most of the tobosa is dormant.					
H B	Litter Amount				X	
Comments:	20% is the current estimate.					
B	Annual Production				X	
Comments:	600 lbs/ac or kg/ha is the current estimate. Tobosa makes up most of the production.					
B	Invasive Plants			X		
Comments:	Cholla is less than scattered, but snakeweed is found on the upland hillside.					
B	Reproductive Capability of Perennial Plants				X	
Comments:	Some limitations.					

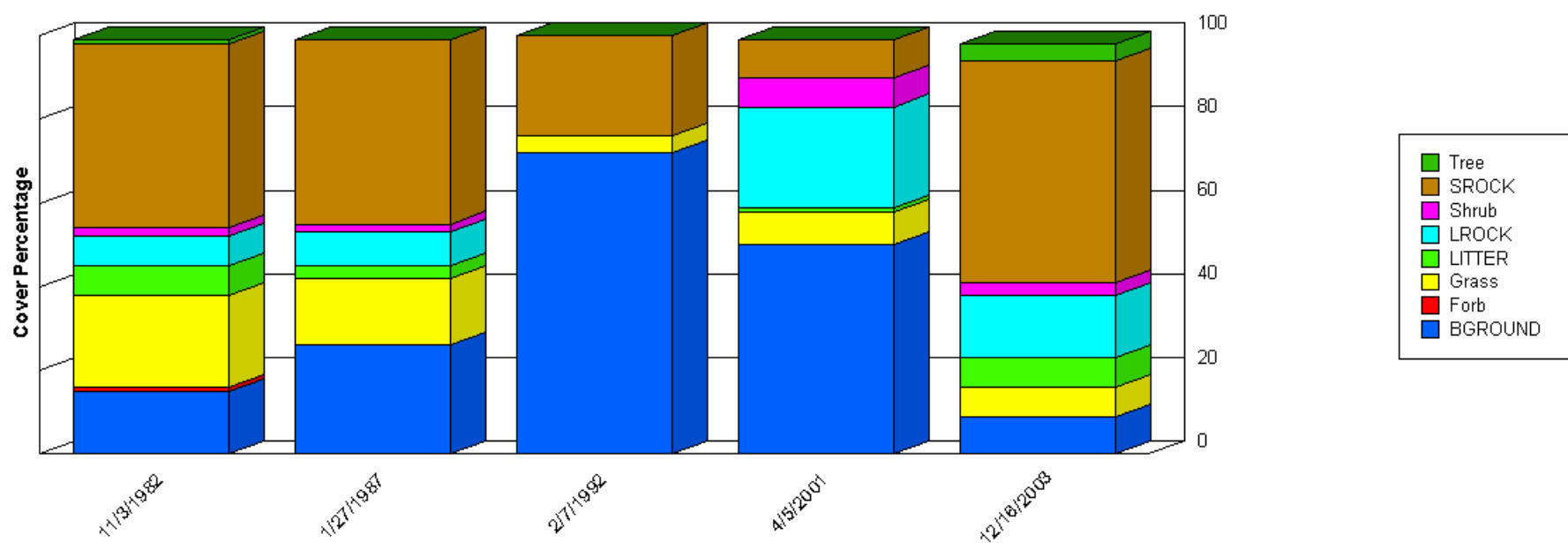
S	Physical/Chemical/Biological Crusts				X	
Comments:	Physical crusts observed.					
B	Wildlife Habitat			X		
Comments:	The lack of sufficient quality browse species as an alternate but preferred source of forage restricts this sites' potential. Forbs constitute the bulk of the dietary constituents available for wild ungulates. Because of the reduced quantities of available forage, a moderate rating is required for wildlife habitat.					
B	Wildlife Populations			X		
Comments:	<p>Pronghorn antelope (<i>Antilocapra americana</i>), mule deer (<i>Odocoileus hemionus</i>), scaled quail (<i>Callipepla squamata</i>) and jackrabbits (<i>Lepus californicus</i>) inhabit the site as do various passerine birds and raptors. Wildlife observations in this pasture would indicate that they reside in it; however, the woven wire fences in the allotment restrict the gene flow for pronghorn antelope between and among populations residing in adjacent pastures.</p> <p>Wildlife population data do not exist for this allotment therefore an assessment as to the status of the various species is not possible at this time</p>					
B	Special Status Species Habitat					X
Comments:	None known to occur.					
B	Special Status Species Populations					X
Comments:	None known to occur.					
Part 3. Summary						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	6	4
H	Hydrologic	0	0	0	8	3
B	Biotic	0	0	4	6	3
B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the <i>Does not Meet</i> column, Moderate becomes <i>May Need</i>						

More Info, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		0	4	9

Site Notes: This site is situated in a tobosa type swale with this grass dominating. Cholla is also found on site and is flowering. Quail, jackrabbits, passerines, muledeer and pronghorn inhabit this lowland area. Snakeweed is found on the upland east of the immediate location along with other less numerous species of shrubs.

Ground Cover Trends



	11/3/1982	1/27/1987	2/7/1992	4/5/2001	12/16/2003
BGROUND	15.00	26.00	72.00	50.00	9.00
Forb	1.00	0.00	0.00	0.00	0.00
Grass	22.00	16.00	4.00	8.00	7.00
LITTER	7.00	3.00	0.00	1.00	7.00
LROCK	7.00	8.00	0.00	24.00	15.00
Shrub	2.00	2.00	0.00	7.00	3.00
SROCK	44.00	44.00	24.00	9.00	53.00

	11/3/1982	1/27/1987	2/7/1992	4/5/2001	12/16/2003
Tree	1.00	0.00	0.00	0.00	4.00
Total	99.00	99.00	100.00	99.00	98.00

Report Parameters

SITE NAME LIKE 64090-#2-F225
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

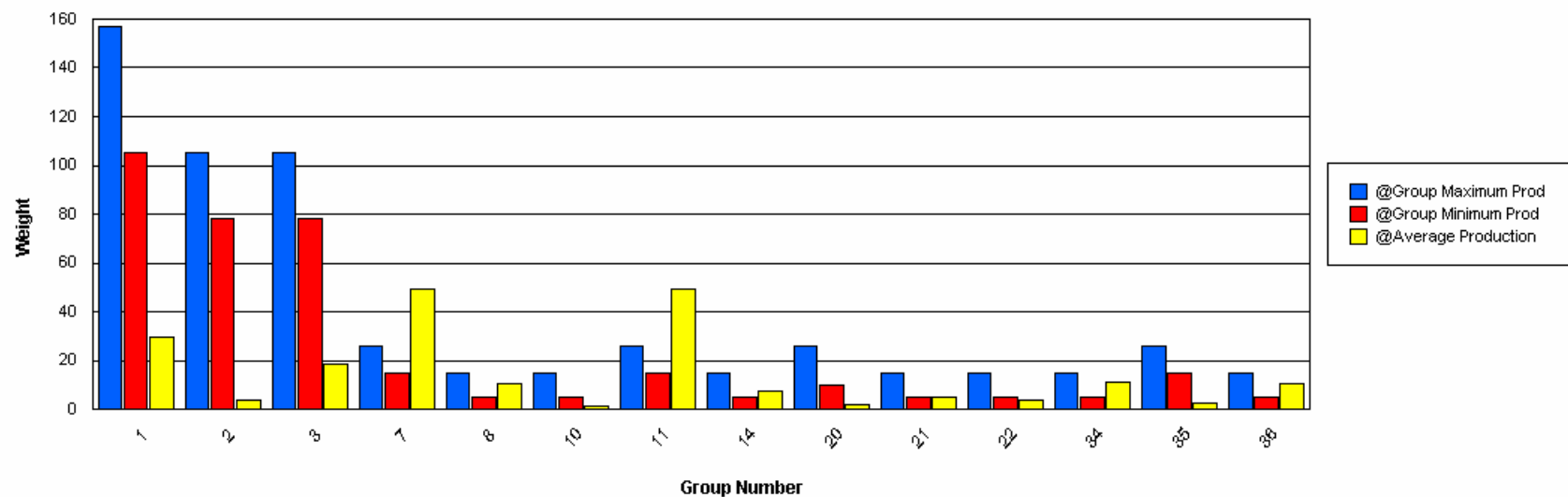
Functional / Structural Groups

Report Parameters

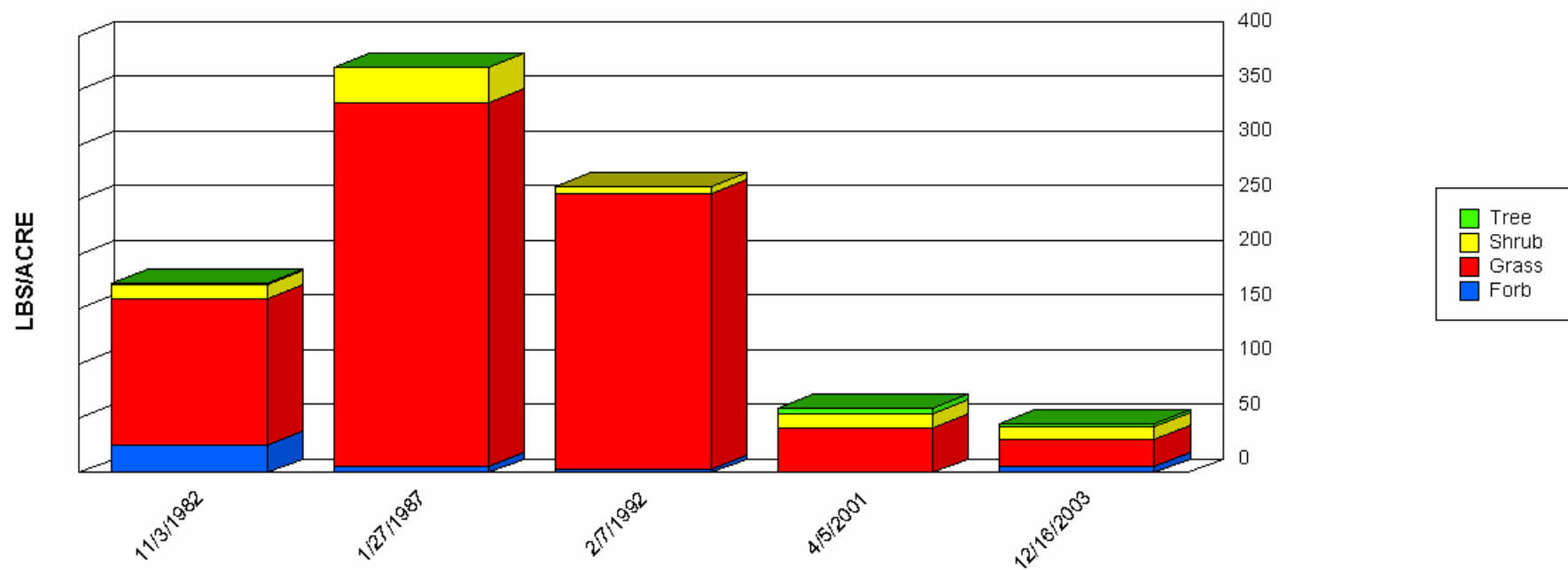
SITE NAME LIKE 64090-#2-F225
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004
 MIN LBS TO GRAPH 1
 SELECTED ECOSITE 042CY025NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	BOER4	105	157	0.00	62.72	29.91	24.49
2	Grass	BOCU	78	105	0.00	10.00	3.91	4.20
3	Grass	BOGR2	78	105	0.00	9.33	3.70	3.67
3	Grass	BOHI2	78	105	0.00	48.00	14.77	17.61
7	Grass	TRMU	15	26	0.00	35.33	19.24	15.69
7	Grass	TRPI2	15	26	0.00	78.67	29.97	29.09
8	Grass	MUAR	5	15	0.00	32.67	10.89	15.40
10	Grass	ERPU8	5	15	0.00	4.00	1.24	1.64
11	Grass	ARIST	15	26	0.00	43.12	18.76	16.02
11	Grass	HIMU2	15	26	8.50	47.00	24.11	16.54
11	Grass	MUAR2	15	26	0.00	28.00	6.55	10.88
14	Grass	ENDE	5	15	0.00	1.78	0.45	0.77
14	Grass	LYPH	5	15	0.00	15.00	3.44	5.81
14	Grass	PAHA	5	15	0.00	12.00	3.77	4.34
20	Forb	CROTO	10	26	0.00	3.27	1.52	1.53
20	Forb	ERIOG	10	26	0.00	1.83	0.46	0.79
21	Forb	AAFF	5	15	0.00	3.78	1.32	1.74
21	Forb	CONVO	5	15	0.00	0.37	0.09	0.16
21	Forb	DYPA	5	15	0.00	5.13	1.28	2.22
21	Forb	LINUM	5	15	0.00	0.37	0.09	0.16
21	Forb	POLYG4	5	15	0.00	8.07	2.02	3.49
22	Forb	CHCO	5	15	0.00	0.37	0.09	0.16
22	Forb	ERTE13	5	15	0.38	3.00	1.69	1.31
22	Forb	MELE2	5	15	0.00	3.67	0.92	1.59
22	Forb	SELO	5	15	0.00	1.83	0.90	0.90
24	Shrub	RHUS+	5	15	0.00	1.57	0.52	0.74

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
32	Shrub	OPIM	5	15	0.00	0.33	0.22	0.16
32	Shrub	OPUNT	5	15	0.00	0.13	0.04	0.06
33	Shrub	PAIN2	10	26	0.00	2.60	0.65	1.13
34	Shrub	GUSA2	5	15	0.00	25.48	11.07	9.16
35	Tree	YUEL	15	26	0.00	5.50	2.75	2.75
36	Shrub	ACACI	5	15	0.00	5.20	1.73	2.45
36	Shrub	ACCO2	5	15	0.00	12.00	6.00	6.00
36	Tree	ACGR	5	15	0.00	2.33	0.88	0.97
36	Shrub	DAFO	5	15	0.00	6.00	1.84	2.13
36	Shrub	DALEA	5	15	0.00	0.73	0.18	0.32



Production Lbs/Acre Trends

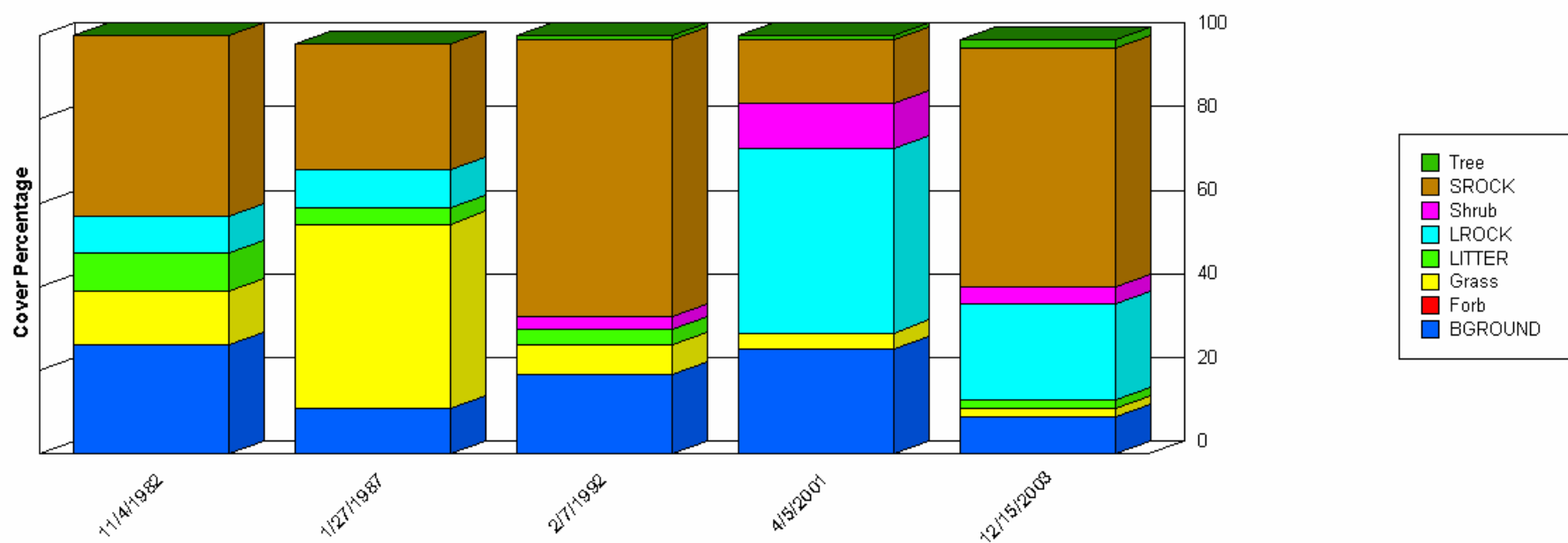


	11/3/1982	1/27/1987	2/7/1992	4/5/2001	12/16/2003
Forb	24.90	5.54	3.00	0.00	5.75
Grass	133.82	332.95	253.00	40.38	24.65
Shrub	13.78	32.71	6.00	13.25	11.69
Tree	1.20	0.00	0.00	5.50	2.33
Total	173.70	371.21	262.00	59.13	44.42

Report Parameters

SITE NAME LIKE 64090-#2-F225
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

Ground Cover Trends



	11/4/1982	1/27/1987	2/7/1992	4/5/2001	12/15/2003
BGROUND	26.00	11.00	19.00	25.00	9.00
Forb	0.00	0.00	0.00	0.00	0.00
Grass	13.00	44.00	7.00	4.00	2.00
LITTER	9.00	4.00	4.00	0.00	2.00
LROCK	9.00	9.00	0.00	44.00	23.00
Shrub	0.00	0.00	3.00	11.00	4.00
SROCK	43.00	30.00	66.00	15.00	57.00

	11/4/1982	1/27/1987	2/7/1992	4/5/2001	12/15/2003
Tree	0.00	0.00	1.00	1.00	2.00
Total	100.00	98.00	100.00	100.00	99.00

Report Parameters

SITE NAME LIKE 64090-ANTELOPE-F226
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

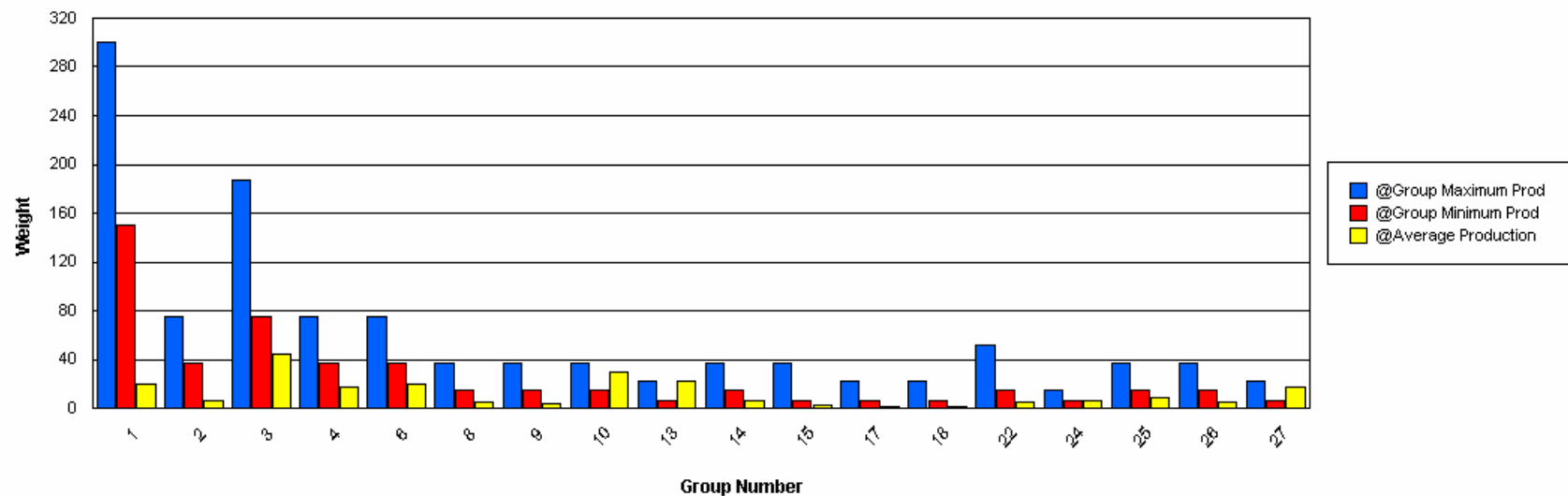
Functional / Structural Groups

Report Parameters

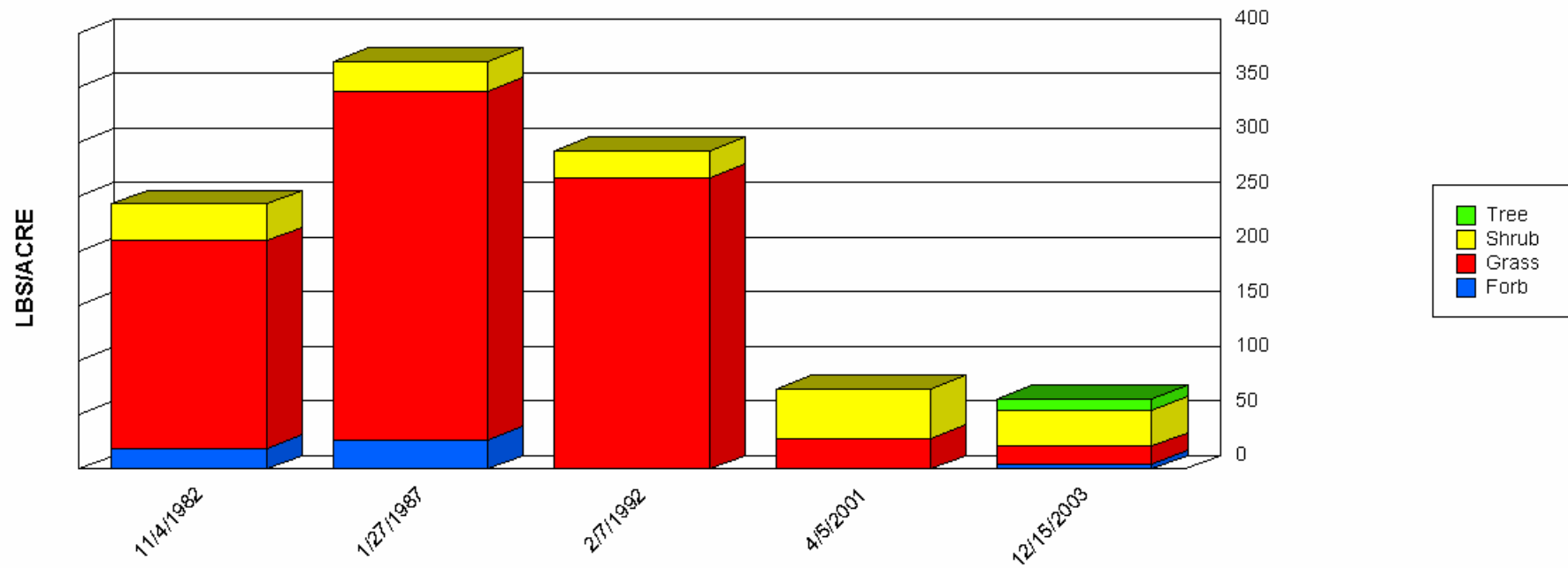
SITE NAME LIKE 64090-ANTELOPE-F226
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004
 MIN LBS TO GRAPH 1
 SELECTED ECOSITE 070DY158NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	BOER4	150	300	1.70	63.00	20.26	22.17
2	Grass	BOCU	37	75	0.00	17.36	6.17	6.90
3	Grass	TRMU	75	187	0.00	53.27	20.36	19.27
3	Grass	TRPI2	75	187	0.00	61.56	24.18	24.08
4	Grass	BOGR2	37	75	0.00	54.67	16.76	20.20
4	Grass	SPCR	37	75	0.00	1.94	0.65	0.91
6	Grass	ARIST	37	75	0.00	60.11	20.52	20.54
8	Grass	LYPH	15	37	0.00	15.25	5.28	5.98
9	Grass	PAHA	15	37	0.00	14.00	4.31	5.40
10	Grass	BOHI2	15	37	0.00	92.00	25.93	34.38
10	Grass	ERPU8	15	37	0.00	3.40	1.73	1.27
10	Grass	HIMU2	15	37	0.00	5.01	2.05	2.15
10	Grass	LEDU	15	37	0.00	1.30	0.33	0.56
10	Grass	STNE2	15	37	0.00	0.58	0.19	0.27
13	Grass	ENDE	7	22	0.00	0.59	0.15	0.26
13	Grass	LECO	7	22	0.00	2.53	0.63	1.10
13	Grass	MUAR	7	22	0.00	33.97	11.32	16.02
13	Grass	MUAR2	7	22	0.00	38.97	9.90	16.79
14	Forb	CROTO	15	37	0.00	10.13	4.42	3.78
14	Forb	ERIOG	15	37	0.00	4.32	1.44	2.04
15	Forb	SELO	7	37	0.00	6.16	3.04	3.04
17	Forb	DYPA	7	22	0.00	4.03	1.01	1.75
18	Forb	AAFF	7	22	0.00	6.48	2.16	3.05
19	Forb	CASSI	7	22	0.00	0.37	0.09	0.16
19	Forb	MELE2	7	22	0.00	1.83	0.46	0.79
19	Forb	TRAM9	7	22	0.00	1.10	0.28	0.48

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
22	Shrub	NOMI	15	52	0.00	9.52	4.76	4.76
24	Shrub	OPUNT	7	15	0.00	10.00	6.44	4.57
25	Shrub	GUSA2	15	37	0.00	20.63	9.47	7.15
26	Shrub	DAFO	15	37	0.00	10.00	4.80	4.09
27	Shrub	ACACI	7	22	0.00	20.00	6.60	8.17
27	Shrub	ACCO2	7	22	0.00	21.33	10.67	10.67



Production Lbs/Acre Trends

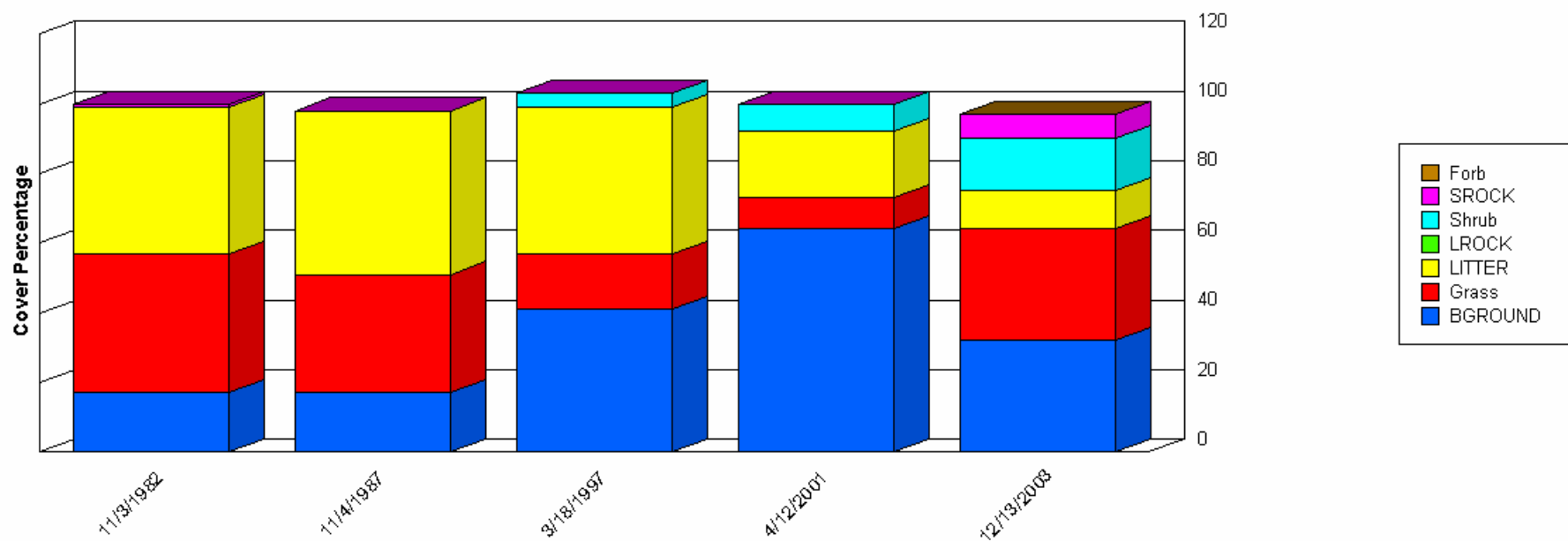


	11/4/1982	1/27/1987	2/7/1992	4/5/2001	12/15/2003
Forb	18.56	27.09	0.00	0.00	4.93
Grass	190.78	319.77	267.00	28.37	15.86
Shrub	33.80	27.03	25.00	44.57	32.78
Tree	0.00	0.00	0.00	0.00	10.33
Total	243.14	373.89	292.00	72.95	63.89

Report Parameters

SITE NAME LIKE 64090-ANTELOPE-F226
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

Ground Cover Trends



	11/3/1982	11/4/1987	3/18/1997	4/12/2001	12/13/2003
BGROUND	17.00	17.00	41.00	64.00	32.00
Forb	0.00	0.00	0.00	0.00	0.00
Grass	40.00	34.00	16.00	9.00	32.00
LITTER	42.00	47.00	42.00	19.00	11.00
LROCK	0.00	0.00	0.00	0.00	0.00
Shrub	0.00	0.00	4.00	8.00	15.00
SROCK	1.00	0.00	0.00	0.00	7.00

	11/3/1982	11/4/1987	3/18/1997	4/12/2001	12/13/2003
Total	100.00	98.00	103.00	100.00	97.00

Report Parameters

SITE NAME LIKE 64090-CROOKED CREEK-F237
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

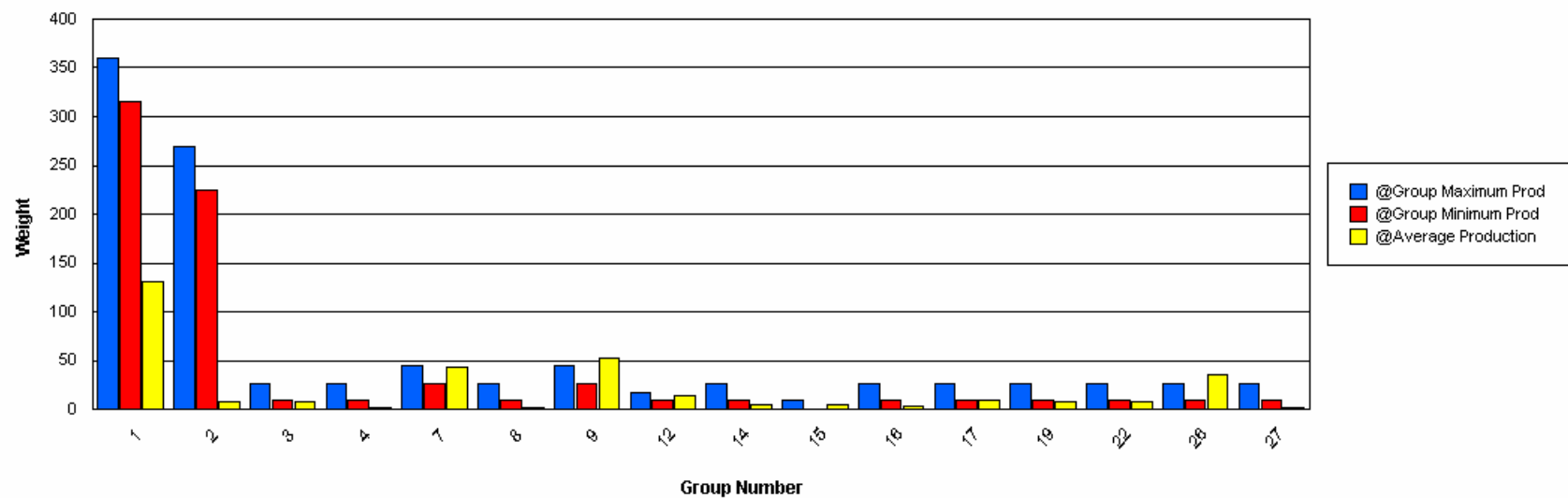
Functional / Structural Groups

Report Parameters

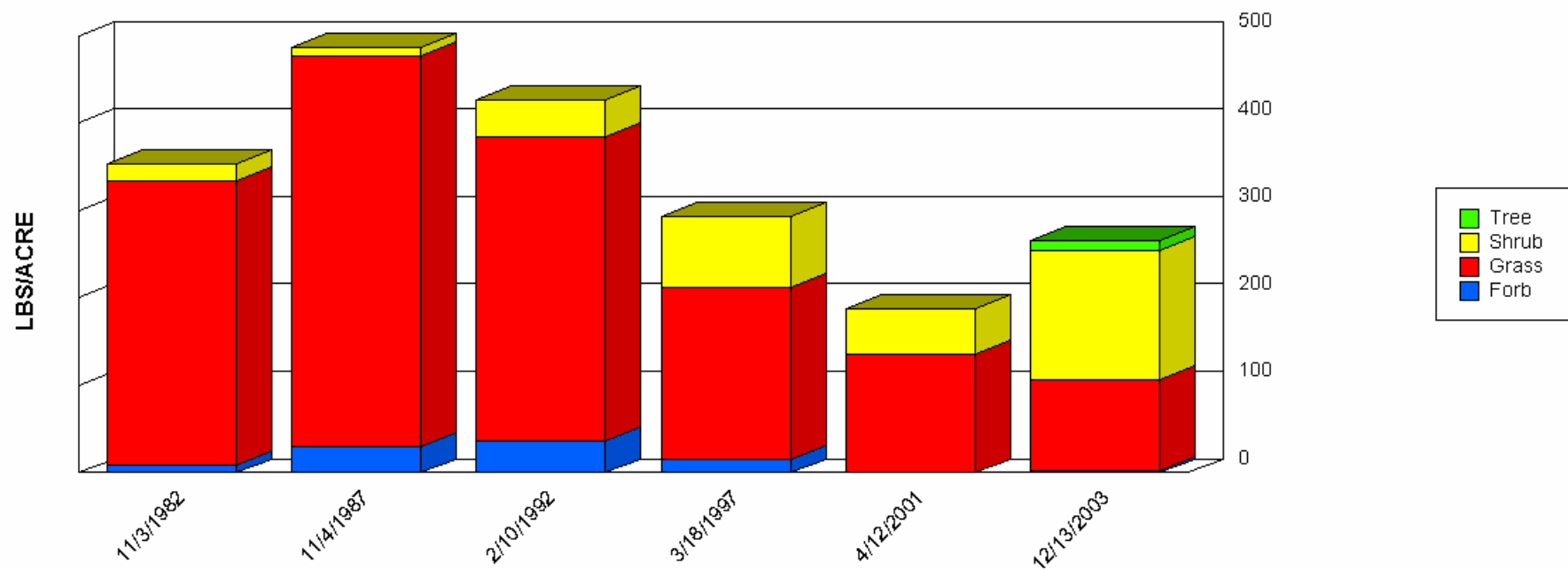
SITE NAME LIKE 64090-CROOKED CREEK-F237
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004
 MIN LBS TO GRAPH 1
 SELECTED ECOSITE 042CY007NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	HIMU2	315	360	0.00	104.88	64.06	34.77
1	Grass	SCBR2	315	360	16.61	167.00	67.11	49.94
2	Grass	BOER4	225	270	0.00	8.53	2.13	3.24
2	Grass	BOGR2	225	270	0.00	25.52	5.47	10.05
3	Grass	BOCU	9	27	0.00	32.87	8.42	12.74
4	Grass	SEMA5	9	27	0.00	10.33	2.07	4.13
6	Grass	SPAI	27	45	0.00	1.15	0.38	0.54
7	Grass	ARIST	27	45	0.00	148.52	31.01	53.32
7	Grass	SPCR	27	45	0.00	32.76	13.06	13.88
8	Grass	PAOB	9	27	0.00	6.07	2.02	2.86
9	Grass	MUAR	27	45	0.00	113.00	35.24	37.92
9	Grass	MUAR2	27	45	0.00	25.15	10.74	10.08
9	Grass	MURI	27	45	0.00	26.88	6.72	11.64
12	Grass	PAHA	9	18	0.00	32.63	13.66	11.61
14	Grass	TRMU	9	27	0.00	16.43	4.87	5.90
15	Grass	TRPI2	0	9	0.00	18.36	5.42	6.81
16	Grass	AAGG	9	27	0.00	16.00	4.00	6.93
17	Grass	ERPU8	9	27	0.00	1.72	0.34	0.69
17	Grass	LECO	9	27	0.00	4.62	1.54	2.18
17	Grass	LYPH	9	27	0.00	14.40	3.60	6.24
17	Grass	MUTO2	9	27	0.00	5.72	1.91	2.70
17	Grass	SCHED	9	27	0.00	7.44	1.49	2.98
18	Forb	SPHAE	9	27	0.00	0.73	0.27	0.33
19	Forb	CROTO	9	27	0.00	2.70	0.83	1.00
19	Forb	PENA	9	27	0.00	26.00	7.51	8.70
20	Forb	PLANT	9	27	0.00	1.50	0.50	0.71

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
22	Forb	AAFF	9	27	0.00	13.20	5.66	5.52
22	Forb	GAURA	9	27	0.00	0.30	0.10	0.14
22	Forb	PORTU	9	27	0.00	5.33	1.78	2.51
24	Forb	DEVE2	9	27	0.00	1.47	0.29	0.59
24	Forb	PPFF	9	27	0.00	0.90	0.41	0.37
26	Shrub	GUSA2	9	27	0.00	15.18	4.48	6.03
26	Shrub	OPUNT	9	27	0.00	82.00	31.23	30.02
27	Shrub	ACACI	9	27	0.00	0.95	0.32	0.45
27	Shrub	NOLIN	9	27	0.00	2.67	0.89	1.26



Production Lbs/Acre Trends

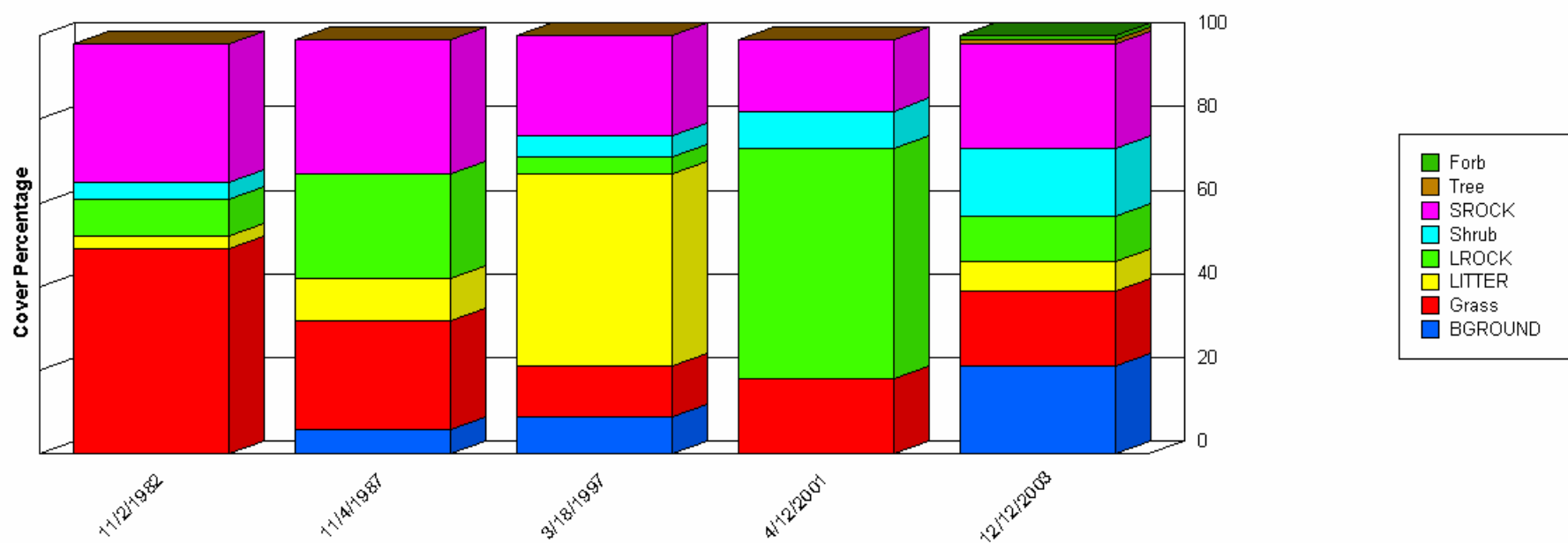


	11/3/1982	11/4/1987	2/10/1992	3/18/1997	4/12/2001	12/13/2003
Forb	8.92	29.76	36.00	16.20	0.00	2.55
Grass	324.59	447.01	348.00	195.28	136.48	104.55
Shrub	19.87	10.28	42.00	82.00	52.00	146.53
Tree	0.00	0.00	0.00	0.00	0.00	12.67
Total	353.39	487.05	426.00	293.48	188.48	266.30

Report Parameters

SITE NAME LIKE 64090-CROOKED CREEK-F237
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

Ground Cover Trends



	11/2/1982	11/4/1987	3/18/1997	4/12/2001	12/12/2003
BGROUND	0.00	6.00	9.00	0.00	21.00
Forb	0.00	0.00	0.00	0.00	1.00
Grass	49.00	26.00	12.00	18.00	18.00
LITTER	3.00	10.00	46.00	0.00	7.00
LROCK	9.00	25.00	4.00	55.00	11.00
Shrub	4.00	0.00	5.00	9.00	16.00
SROCK	33.00	32.00	24.00	17.00	25.00

	11/2/1982	11/4/1987	3/18/1997	4/12/2001	12/12/2003
Tree	0.00	0.00	0.00	0.00	1.00
Total	98.00	99.00	100.00	99.00	100.00

Report Parameters

SITE NAME LIKE 64090-DARK CANYON-F233
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

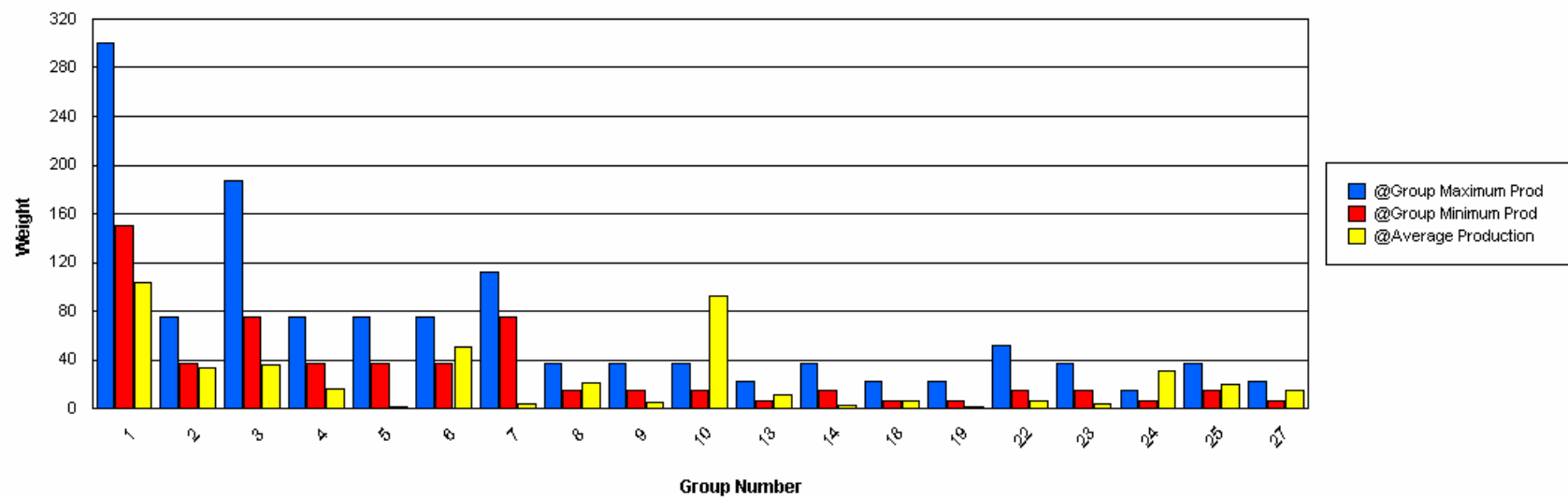
Functional / Structural Groups

Report Parameters

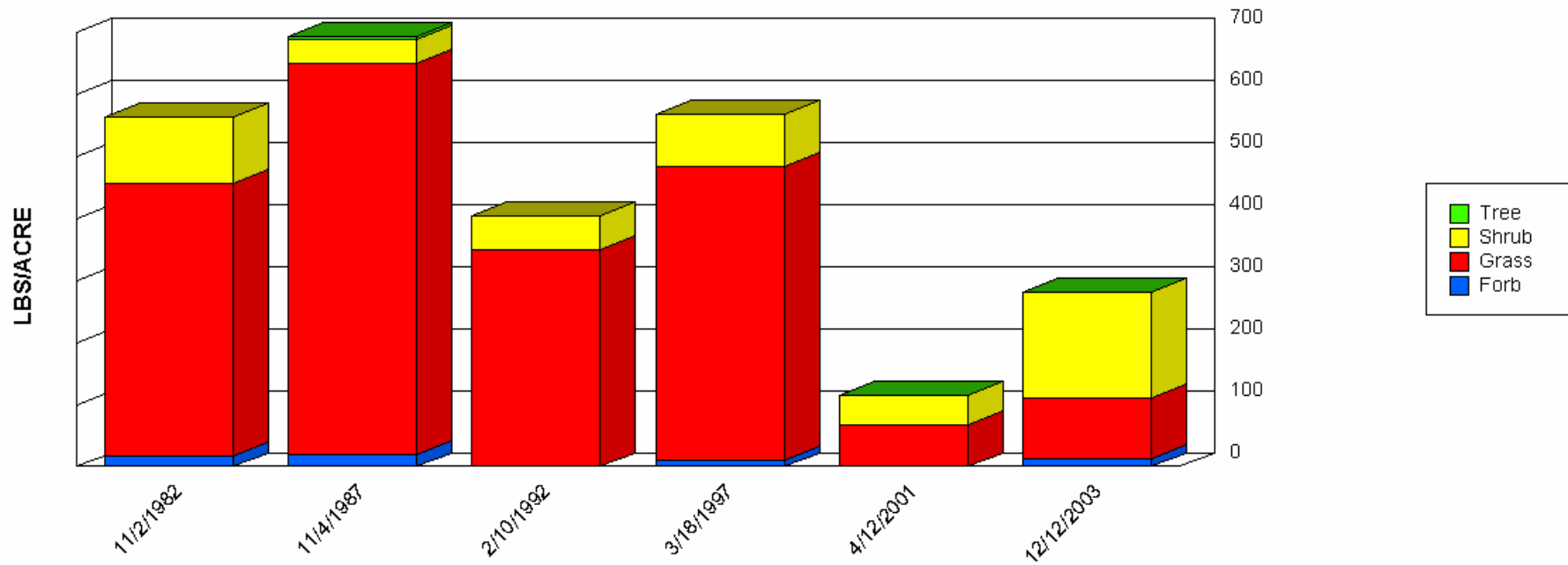
SITE NAME LIKE 64090-DARK CANYON-F233
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004
 MIN LBS TO GRAPH 1
 SELECTED ECOSITE 070DY158NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	BOER4	150	300	6.23	205.70	103.98	63.58
2	Grass	BOCU	37	75	0.00	96.90	33.54	30.69
3	Grass	TRIDE	75	187	0.00	4.01	2.01	2.01
3	Grass	TRMU	75	187	0.00	10.54	3.58	4.50
3	Grass	TRPI2	75	187	0.00	105.30	29.84	39.03
4	Grass	BOGR2	37	75	0.00	42.34	14.97	17.99
4	Grass	SPCR	37	75	0.00	3.44	1.15	1.62
5	Grass	SCBR2	37	75	0.00	3.92	1.70	1.64
6	Grass	ARIST	37	75	0.00	178.60	50.33	62.03
7	Grass	MUSE	75	112	0.00	10.89	3.63	5.14
8	Grass	LYPH	15	37	0.00	61.20	21.16	22.34
9	Grass	PAHA	15	37	0.00	20.00	5.06	6.92
10	Grass	BOHI2	15	37	0.00	145.58	53.84	53.72
10	Grass	BOSA	15	37	0.00	23.92	8.63	8.77
10	Grass	ERPU8	15	37	0.00	0.59	0.20	0.28
10	Grass	HIMU2	15	37	0.00	82.17	27.58	38.60
10	Grass	LEDU	15	37	0.00	5.46	1.98	2.25
13	Grass	ERAGR	7	22	0.00	21.79	7.26	10.27
13	Grass	LECO	7	22	0.00	7.70	2.13	3.01
13	Grass	MUAR2	7	22	0.00	6.85	1.74	2.65
14	Forb	CROTO	15	37	0.00	3.59	1.15	1.40
14	Forb	ERIOG	15	37	0.00	4.77	1.90	1.93
16	Forb	PECTI	7	22	0.00	0.73	0.15	0.29
18	Forb	AAFF	7	22	0.00	6.60	3.16	2.72
18	Forb	EUPHO	7	22	0.00	0.37	0.07	0.15
18	Forb	HEDEO	7	22	0.00	2.93	0.59	1.17

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
18	Forb	PORTU	7	22	0.00	7.33	2.44	3.46
19	Forb	MELE2	7	22	0.00	0.65	0.13	0.26
19	Forb	PPFF	7	22	0.00	3.90	1.30	1.84
19	Forb	TRAM9	7	22	0.00	2.20	0.44	0.88
22	Shrub	NOLIN	15	52	0.00	27.72	6.34	10.80
23	Shrub	YUCCA	15	37	0.00	12.67	4.22	5.97
24	Shrub	OPIM	7	15	0.00	24.00	5.12	9.46
24	Shrub	OPUNT	7	15	0.00	54.00	25.51	20.15
25	Shrub	GUSA2	15	37	0.00	72.68	19.70	28.25
26	Shrub	DAFO	15	37	0.00	0.39	0.08	0.16
27	Shrub	ACACI	7	22	0.00	14.00	3.50	6.06
27	Tree	ACGR	7	22	0.00	4.26	1.42	2.01
27	Shrub	BRICK	7	22	0.00	40.92	10.23	17.72
27	Shrub	ERLA12	7	22	0.00	1.88	0.38	0.75
27	Shrub	SENEC2	7	22	0.00	0.24	0.08	0.11



Production Lbs/Acre Trends

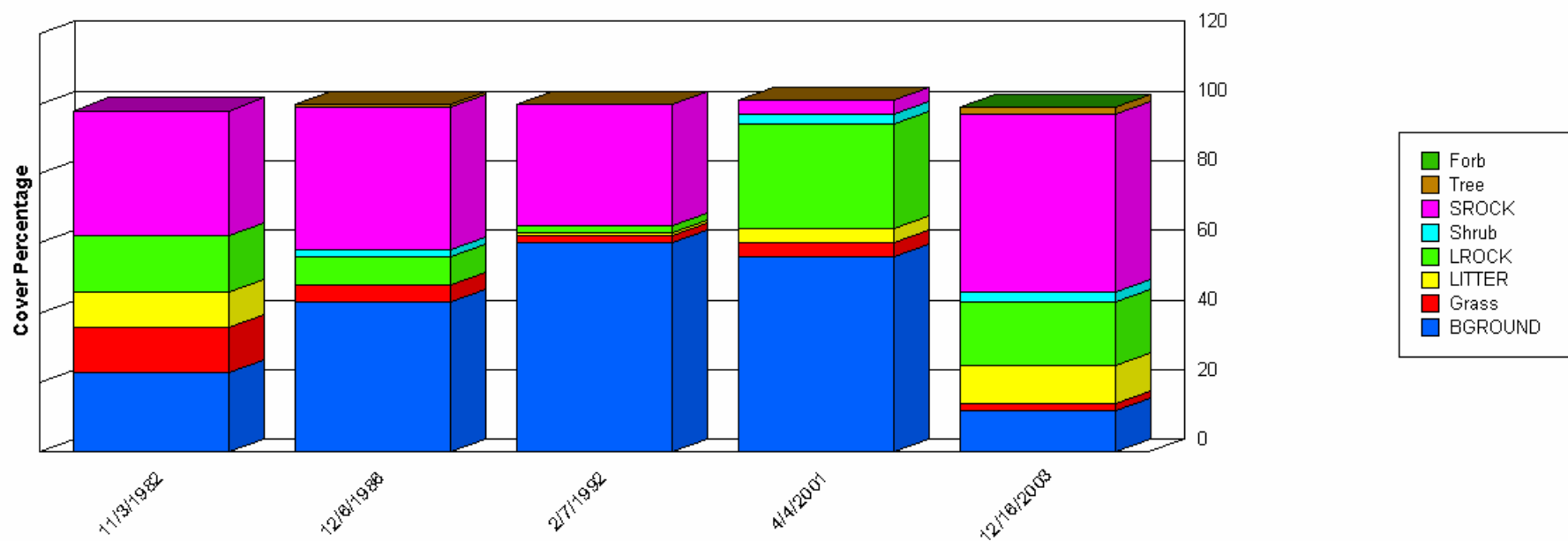


	11/2/1982	11/4/1987	2/10/1992	3/18/1997	4/12/2001	12/12/2003
Forb	16.35	19.33	0.00	9.72	0.00	12.71
Grass	439.10	630.89	350.00	474.78	67.57	97.33
Shrub	107.37	38.61	54.00	82.92	46.67	171.44
Tree	0.00	4.26	0.00	0.00	0.00	0.00
Total	562.81	693.09	404.00	567.42	114.23	281.48

Report Parameters

SITE NAME LIKE 64090-DARK CANYON-F233
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

Ground Cover Trends



	11/3/1982	12/6/1986	2/7/1992	4/4/2001	12/16/2003
BGROUND	23.00	43.00	60.00	56.00	12.00
Forb	0.00	0.00	0.00	0.00	0.00
Grass	13.00	5.00	2.00	4.00	2.00
LITTER	10.00	0.00	1.00	4.00	11.00
LROCK	16.00	8.00	2.00	30.00	18.00
Shrub	0.00	2.00	0.00	3.00	3.00
SROCK	36.00	41.00	35.00	4.00	51.00

	11/3/1982	12/6/1986	2/7/1992	4/4/2001	12/16/2003
Tree	0.00	1.00	0.00	0.00	2.00
Total	98.00	100.00	100.00	101.00	99.00

Report Parameters

SITE NAME LIKE 64090-E SAMPSON-F223
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

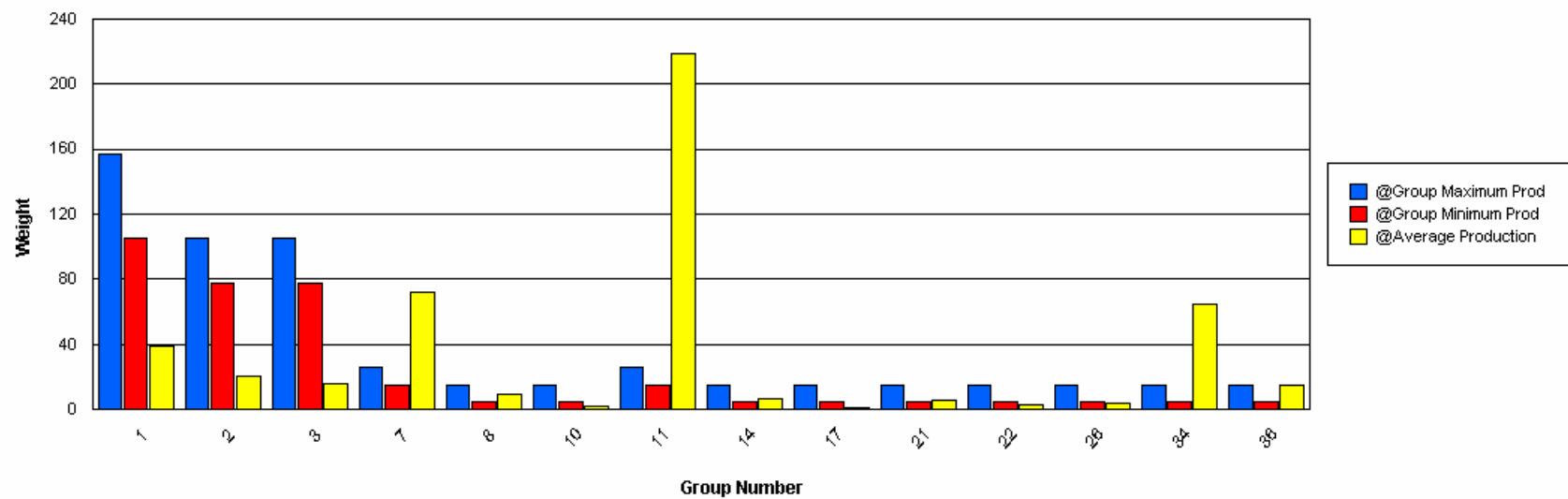
Functional / Structural Groups

Report Parameters

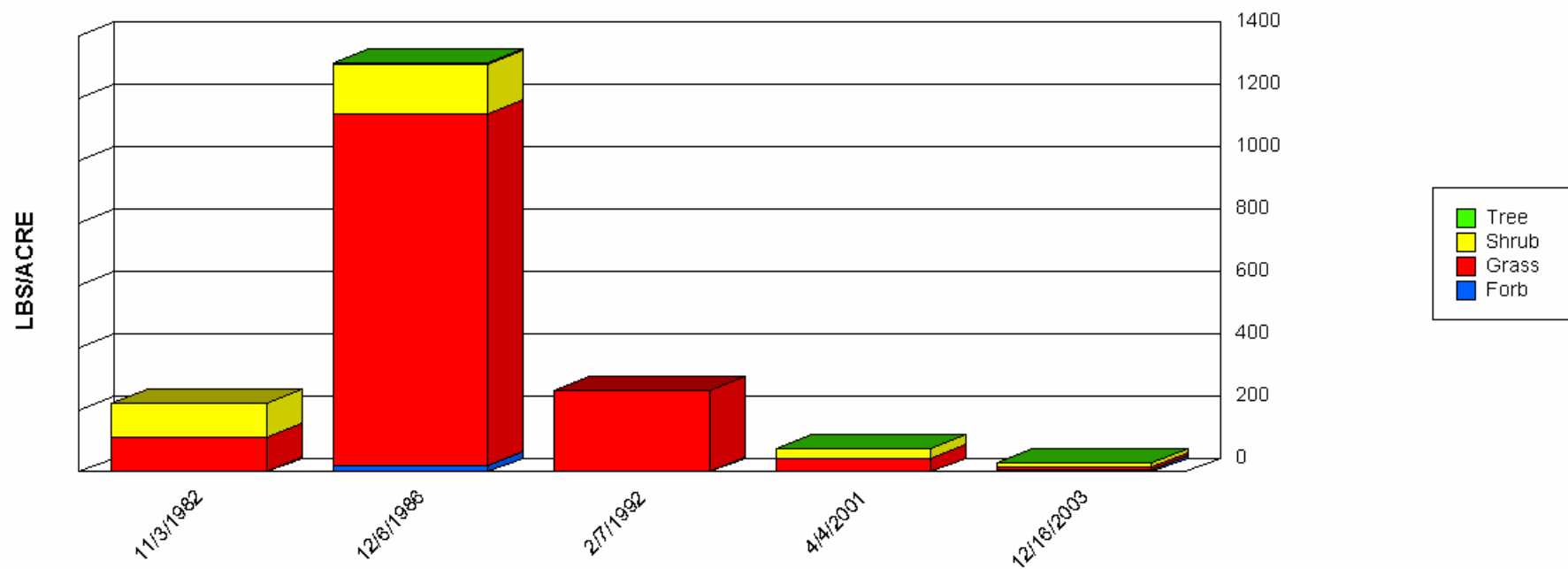
SITE NAME LIKE 64090-E SAMPSON-F223
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004
 MIN LBS TO GRAPH 1
 SELECTED ECOSITE 042CY025NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	BOER4	105	157	0.00	157.36	38.79	59.87
2	Grass	BOCU	78	105	0.00	68.93	20.34	26.60
3	Grass	BOGR2	78	105	0.00	50.00	15.80	20.21
6	Grass	SPCR	26	52	0.00	0.55	0.14	0.24
7	Grass	TRMU	15	26	0.00	119.69	32.10	44.74
7	Grass	TRPI2	15	26	0.00	92.00	39.92	35.64
8	Grass	MUAR	5	15	0.00	28.09	9.36	13.24
10	Grass	ERPU8	5	15	0.00	7.37	2.38	2.94
11	Grass	ARIST	15	26	0.00	127.40	31.97	48.92
11	Grass	HIMU2	15	26	1.70	432.40	158.81	194.17
11	Grass	MUAR2	15	26	0.00	60.00	24.16	27.54
11	Grass	PAOB	15	26	0.00	6.67	2.22	3.14
11	Grass	SCBR2	15	26	0.00	2.77	1.22	1.15
14	Grass	LECO	5	15	0.00	2.27	0.69	0.93
14	Grass	LYPH	5	15	0.00	13.49	4.50	6.36
14	Grass	PAHA	5	15	0.00	2.93	1.45	1.23
17	Forb	SPHAE	5	15	0.00	4.40	1.47	2.07
20	Forb	CROTO	10	26	0.00	1.40	0.43	0.57
21	Forb	AAFF	5	15	0.00	17.28	5.95	8.01
21	Forb	DYPE	5	15	0.00	0.73	0.22	0.30
22	Forb	COCA2	5	15	0.00	0.73	0.18	0.32
22	Forb	ERTE13	5	15	1.52	3.00	2.26	0.74
22	Forb	LEER	5	15	0.00	1.10	0.28	0.48
25	Shrub	LADI2	5	15	0.00	3.54	0.89	1.53
26	Shrub	KRAME	5	15	0.00	17.49	4.37	7.57
34	Shrub	GUSA2	5	15	6.85	160.16	65.02	63.16

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
35	Shrub	EULA5	15	26	0.00	2.28	0.57	0.99
36	Shrub	ACACI	5	15	0.00	1.60	0.40	0.69
36	Shrub	ACCO2	5	15	0.00	14.67	7.33	7.33
36	Tree	ACGR	5	15	0.00	5.12	1.93	2.27
36	Shrub	DAFO	5	15	0.00	10.03	5.01	5.01



Production Lbs/Acre Trends

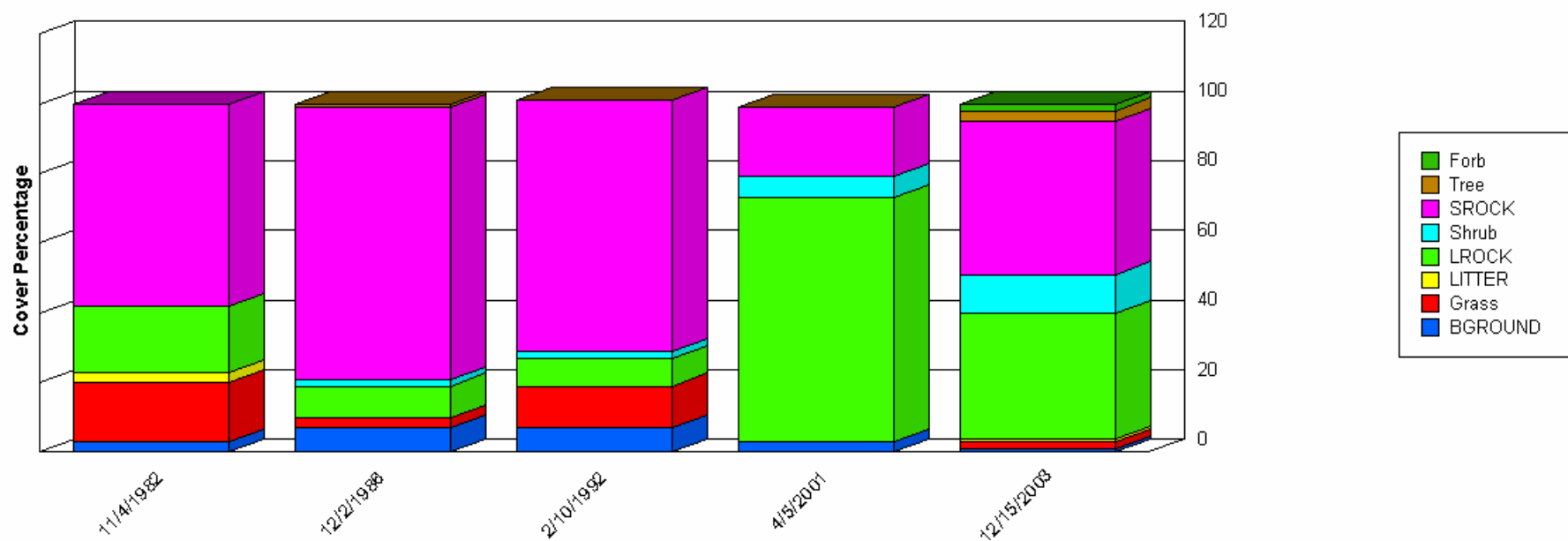


	11/3/1982	12/6/1986	2/7/1992	4/4/2001	12/16/2003
Forb	2.89	21.68	3.00	0.00	5.53
Grass	107.23	1,127.55	258.00	44.20	10.80
Shrub	109.09	160.16	0.00	31.54	12.21
Tree	0.00	5.12	0.00	0.00	0.67
Total	219.22	1,314.51	261.00	75.74	29.22

Report Parameters

SITE NAME LIKE 64090-E SAMPSON-F223
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

Ground Cover Trends



	11/4/1982	12/2/1986	2/10/1992	4/5/2001	12/15/2003
BGROUND	3.00	7.00	7.00	3.00	1.00
Forb	0.00	0.00	0.00	0.00	2.00
Grass	17.00	3.00	12.00	0.00	2.00
LITTER	3.00	0.00	0.00	0.00	1.00
LROCK	19.00	9.00	8.00	70.00	36.00
Shrub	0.00	2.00	2.00	6.00	11.00
SROCK	58.00	78.00	72.00	20.00	44.00

	11/4/1982	12/2/1986	2/10/1992	4/5/2001	12/15/2003
Tree	0.00	1.00	0.00	0.00	3.00
Total	100.00	100.00	101.00	99.00	100.00

Report Parameters

SITE NAME LIKE 64090-E TWIN BUTTE-F229
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

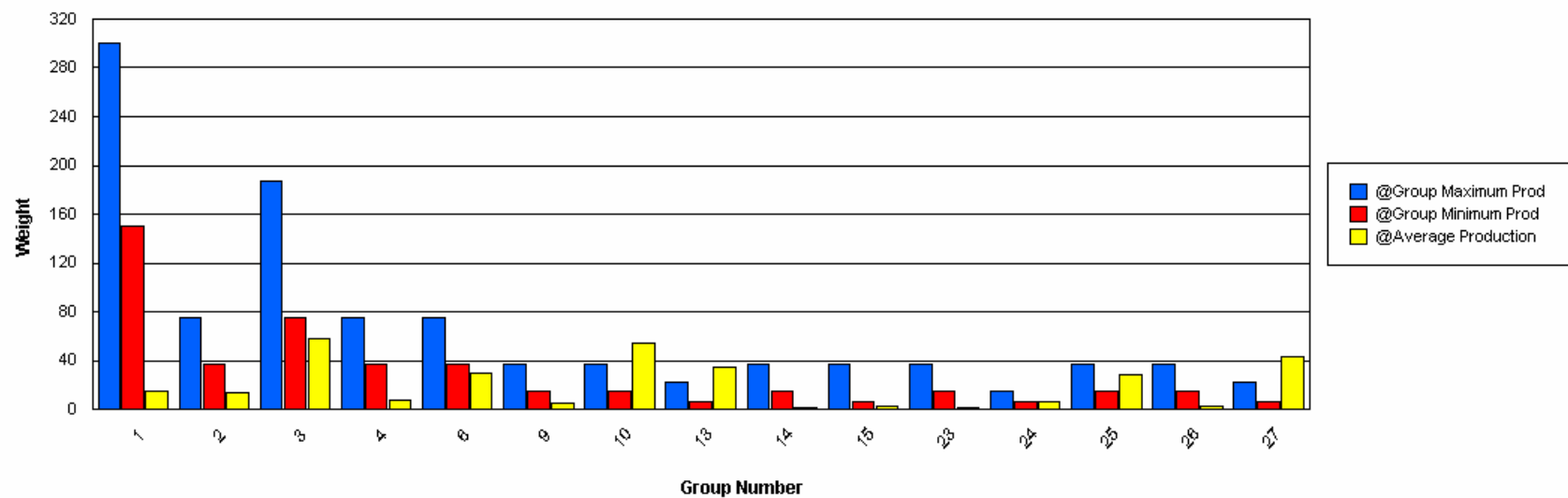
Functional / Structural Groups

Report Parameters

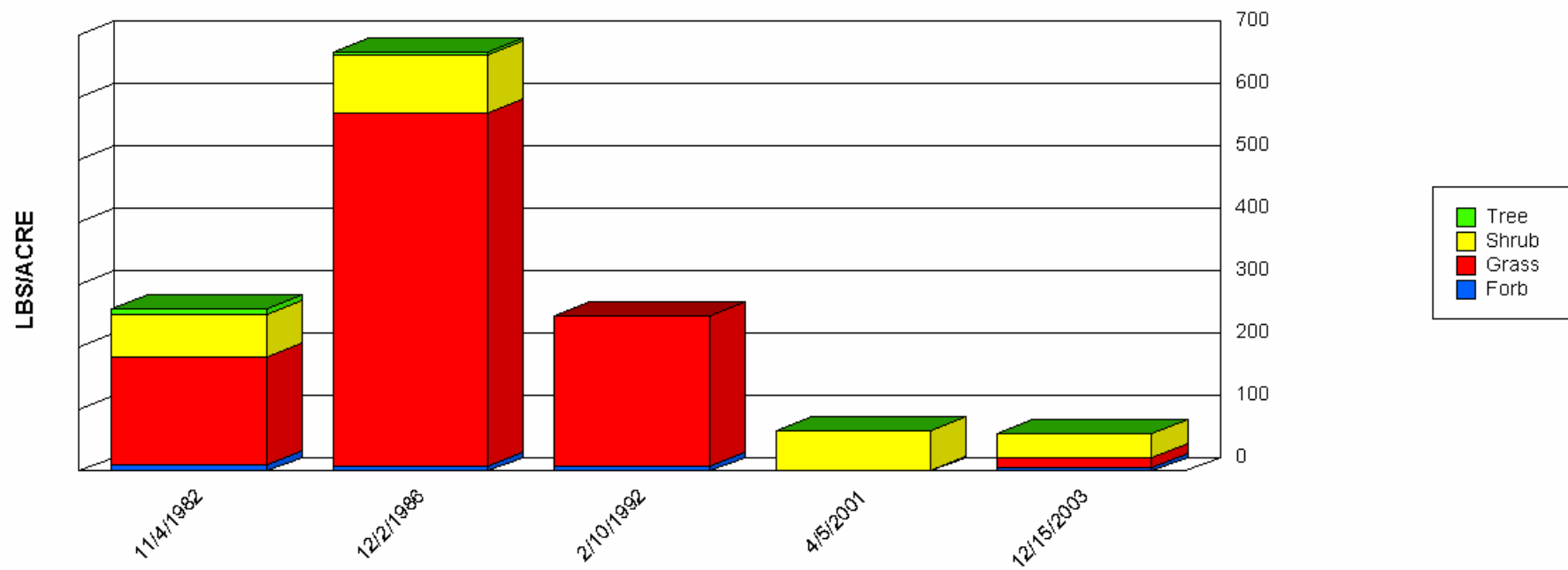
SITE NAME LIKE 64090-E TWIN BUTTE-F229
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004
 MIN LBS TO GRAPH 1
 SELECTED ECOSITE 070DY158NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	BOER4	150	300	0.85	34.72	14.75	15.09
2	Grass	BOCU	37	75	0.00	38.85	13.37	15.54
3	Grass	TRMU	75	187	0.00	144.76	41.43	59.94
3	Grass	TRPI2	75	187	0.00	43.74	16.19	16.35
4	Grass	BOGR2	37	75	0.00	26.67	7.26	10.14
5	Grass	MUTO2	37	75	0.00	1.17	0.29	0.51
6	Grass	ARIST	37	75	0.00	99.31	29.77	36.82
9	Grass	PAHA	15	37	0.00	22.00	5.63	8.26
10	Grass	BOHI2	15	37	0.00	164.00	53.58	64.36
10	Grass	ERPU8	15	37	0.00	1.67	0.71	0.73
13	Grass	ENDE	7	22	0.00	0.62	0.16	0.27
13	Grass	MUAR2	7	22	0.00	35.28	9.25	13.33
13	Grass	MUMO2	7	22	0.00	75.13	25.04	35.42
14	Forb	CROTO	15	37	0.00	3.27	1.31	1.39
14	Forb	ERIOG	15	37	0.00	1.92	0.55	0.80
15	Forb	SELO	7	37	0.00	6.67	2.55	2.78
18	Forb	AAFF	7	22	0.00	1.62	0.68	0.70
22	Shrub	NOMI	15	52	0.00	1.26	0.32	0.55
23	Shrub	DAWH2	15	37	0.00	1.80	0.45	0.78
23	Tree	YUEL	15	37	0.00	3.60	0.90	1.56
24	Shrub	OPUNT	7	15	0.00	20.00	6.69	9.41
25	Shrub	GUSA2	15	37	5.27	61.64	28.26	21.13
26	Shrub	DAFO	15	37	0.29	7.52	2.75	3.37
27	Shrub	ACCO2	7	22	0.00	29.33	14.67	14.67
27	Tree	ACGR	7	22	0.00	7.20	3.20	2.78
27	Shrub	BRICK	7	22	0.00	75.83	25.28	35.75

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
27	Shrub	ERLA12	7	22	0.00	2.51	0.63	1.09



Production Lbs/Acre Trends

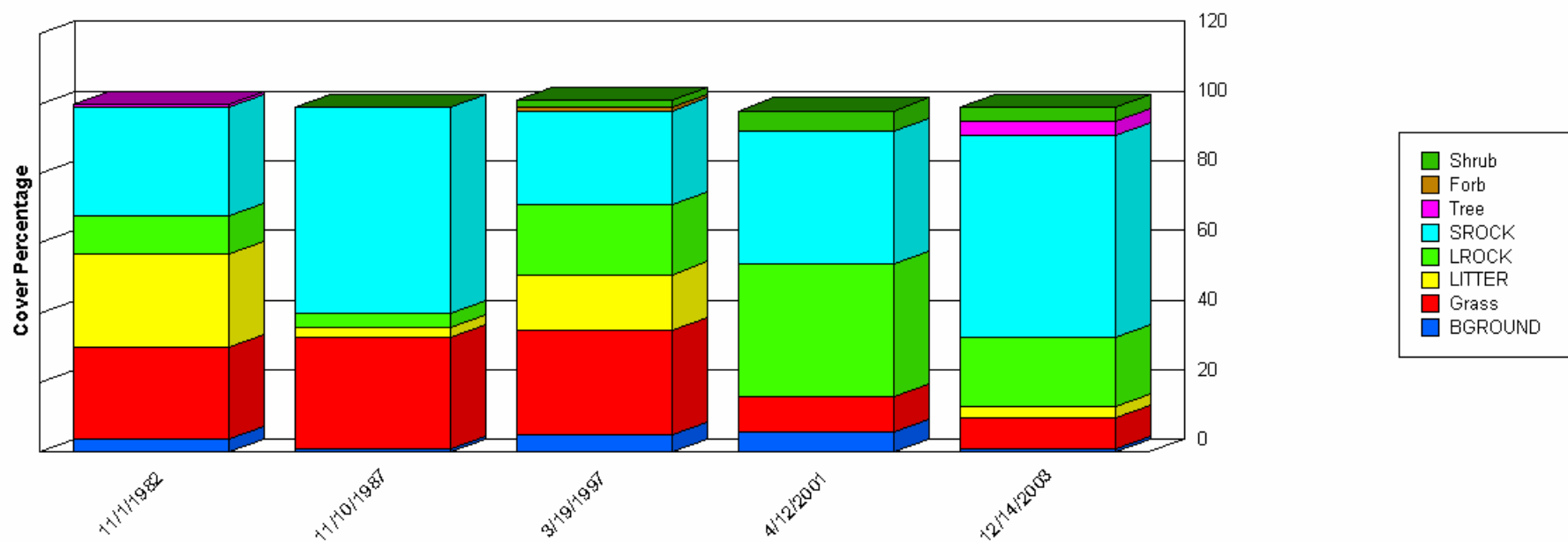


	11/4/1982	12/2/1986	2/10/1992	4/5/2001	12/15/2003
Forb	10.00	7.06	8.00	0.00	4.93
Grass	173.44	568.26	242.00	1.70	17.33
Shrub	67.21	92.71	0.00	62.12	37.64
Tree	10.80	4.27	0.00	0.00	1.33
Total	261.45	672.30	250.00	63.82	61.23

Report Parameters

SITE NAME LIKE 64090-E TWIN BUTTE-F229
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

Ground Cover Trends



	11/1/1982	11/10/1987	3/19/1997	4/12/2001	12/14/2003
BGROUND	4.00	1.00	5.00	6.00	1.00
Forb	0.00	0.00	1.00	0.00	0.00
Grass	26.00	32.00	30.00	10.00	9.00
LITTER	27.00	3.00	16.00	0.00	3.00
LROCK	11.00	4.00	20.00	38.00	20.00
Shrub	0.00	0.00	2.00	6.00	4.00
SROCK	31.00	59.00	27.00	38.00	58.00

	11/1/1982	11/10/1987	3/19/1997	4/12/2001	12/14/2003
Tree	1.00	0.00	0.00	0.00	4.00
Total	100.00	99.00	101.00	98.00	99.00

Report Parameters

SITE NAME LIKE 64090-EAST TURNER-F232
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

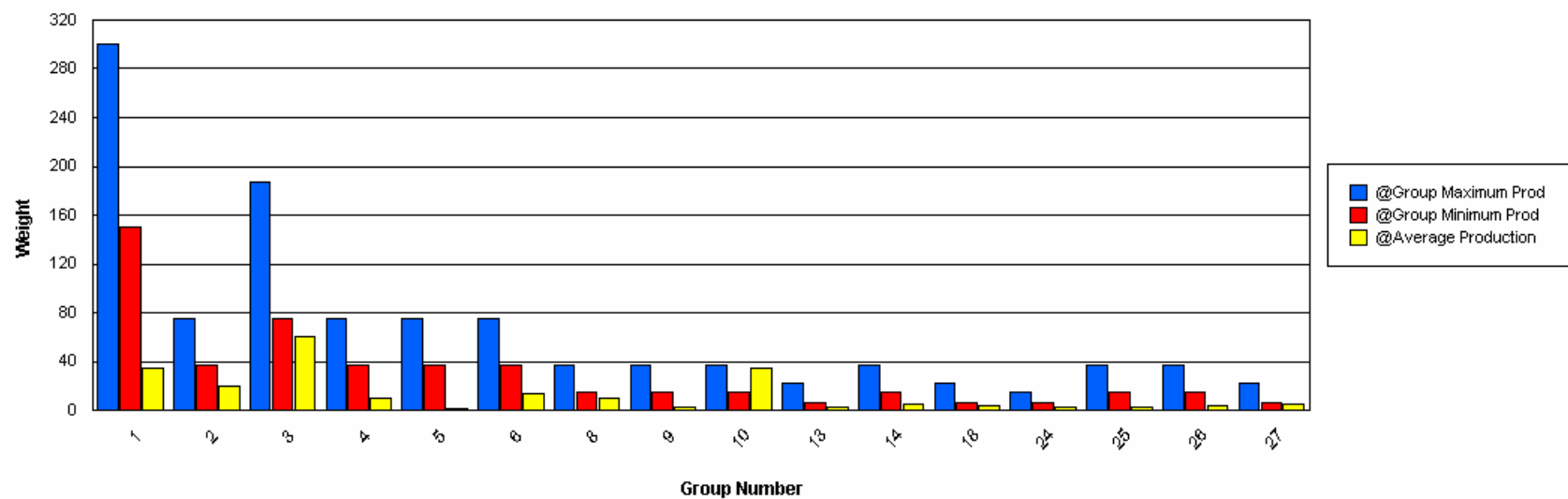
Functional / Structural Groups

Report Parameters

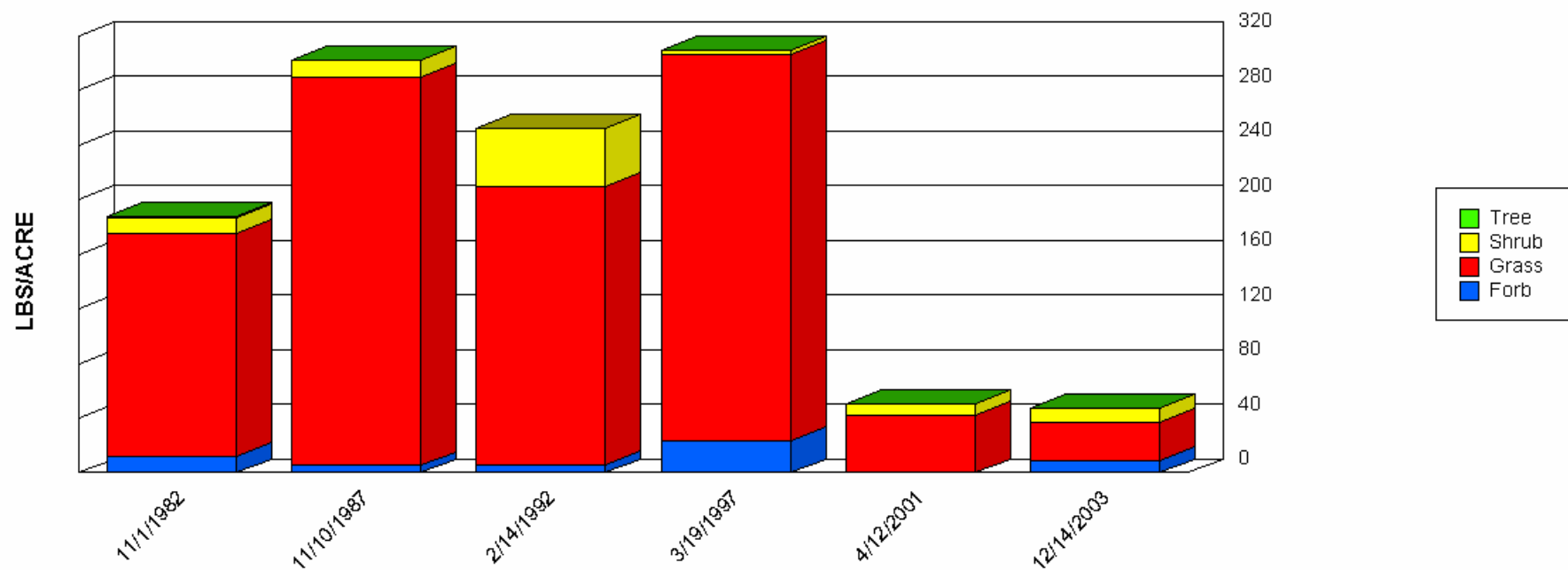
SITE NAME LIKE 64090-EAST TURNER-F232
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004
 MIN LBS TO GRAPH 1
 SELECTED ECOSITE 070DY158NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	BOER4	150	300	6.80	57.07	34.13	17.91
2	Grass	BOCU	37	75	0.00	70.30	19.83	23.98
3	Grass	TRIDE	75	187	0.00	71.00	27.11	31.32
3	Grass	TRMU	75	187	0.00	29.76	7.78	11.20
3	Grass	TRPI2	75	187	0.00	57.20	25.85	24.08
4	Grass	BOGR2	37	75	0.00	26.00	7.15	8.95
4	Grass	SPCR	37	75	0.00	12.32	3.08	5.33
4	Grass	SPFL2	37	75	0.00	1.09	0.22	0.44
5	Grass	MUTO2	37	75	0.00	3.36	1.23	1.38
6	Grass	ARIST	37	75	0.00	41.99	14.15	13.80
8	Grass	LYPH	15	37	0.00	39.60	10.19	16.98
9	Grass	PAHA	15	37	0.00	10.00	2.80	3.68
10	Grass	BOHI2	15	37	0.00	89.32	31.23	30.99
10	Grass	ERPU8	15	37	0.00	5.67	1.94	2.21
10	Grass	LEDU	15	37	0.00	5.28	1.76	2.49
13	Grass	LECO	7	22	0.00	4.15	0.93	1.62
13	Grass	MUAR	7	22	0.00	1.15	0.23	0.46
13	Grass	MUAR2	7	22	0.00	3.68	1.23	1.73
14	Forb	CROTO	15	37	0.00	4.86	2.37	1.55
14	Forb	CRPO5	15	37	0.00	6.86	1.37	2.74
14	Forb	ERIOG	15	37	0.00	4.40	1.22	1.64
15	Forb	SENEC	7	37	0.00	2.50	0.50	1.00
16	Forb	PECTI	7	22	0.00	1.47	0.29	0.59
17	Forb	DYPE2	7	22	0.00	0.41	0.19	0.17
18	Forb	AAFF	7	22	0.00	13.64	4.21	4.89
18	Forb	TRAGI	7	22	0.00	0.30	0.10	0.14

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
19	Forb	DEVE2	7	22	0.00	0.37	0.07	0.15
19	Forb	SOEL	7	22	0.00	0.88	0.22	0.38
24	Shrub	OPUNT	7	15	0.00	5.33	2.18	1.96
25	Shrub	GUSA2	15	37	0.00	10.12	2.72	3.78
26	Shrub	DAFO	15	37	0.00	14.00	3.55	4.74
27	Shrub	ACACI	7	22	0.00	9.47	3.87	4.06
27	Shrub	ACCO2	7	22	0.00	0.67	0.33	0.33
27	Tree	ACGR	7	22	0.00	0.40	0.08	0.16
27	Shrub	ALWR	7	22	0.00	1.82	0.46	0.79



Production Lbs/Acre Trends

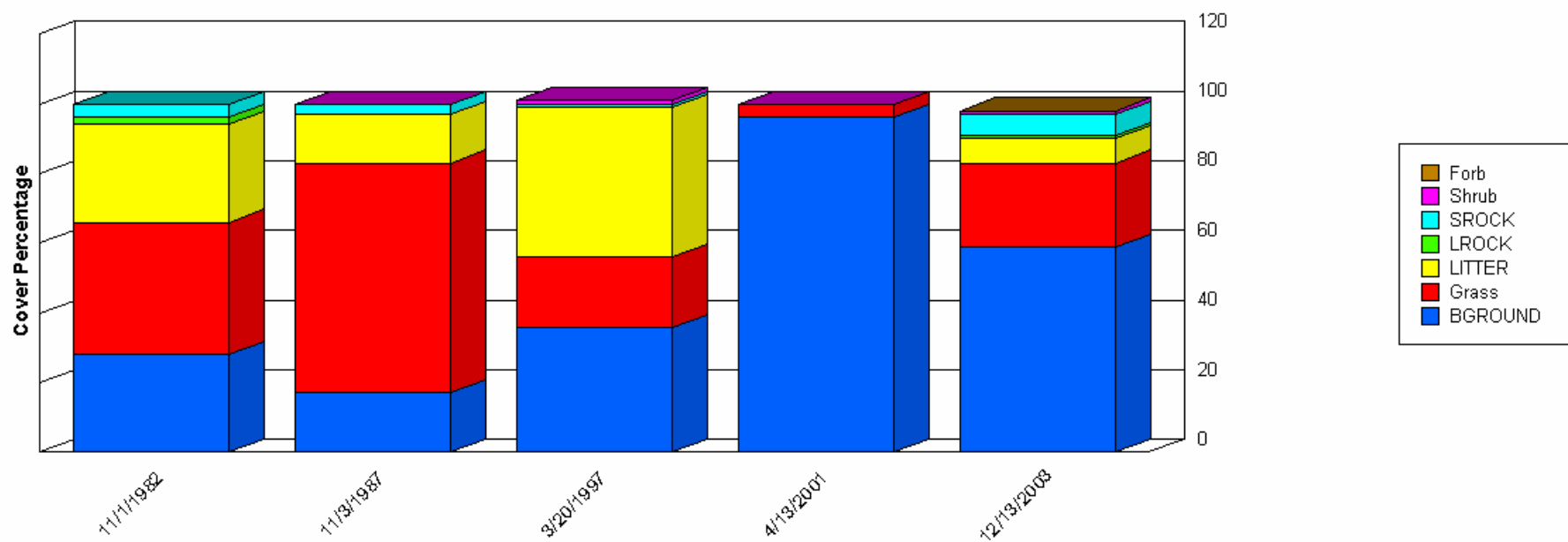


	11/1/1982	11/10/1987	2/14/1992	3/19/1997	4/12/2001	12/14/2003
Forb	12.29	5.21	6.00	23.78	0.00	8.99
Grass	163.05	284.59	204.00	282.68	41.75	28.03
Shrub	11.69	12.90	42.00	3.40	8.51	10.08
Tree	0.40	0.00	0.00	0.00	0.00	0.00
Total	187.43	302.70	252.00	309.86	50.26	47.10

Report Parameters

SITE NAME LIKE 64090-EAST TURNER-F232
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

Ground Cover Trends



	11/1/1982	11/3/1987	3/20/1997	4/13/2001	12/13/2003
BGROUND	28.00	17.00	36.00	96.00	59.00
Forb	0.00	0.00	0.00	0.00	0.00
Grass	38.00	66.00	20.00	4.00	24.00
LITTER	28.00	14.00	43.00	0.00	7.00
LROCK	2.00	0.00	0.00	0.00	1.00
Shrub	0.00	0.00	1.00	0.00	1.00
SROCK	4.00	3.00	1.00	0.00	6.00

	11/1/1982	11/3/1987	3/20/1997	4/13/2001	12/13/2003
Total	100.00	100.00	101.00	100.00	98.00

Report Parameters

SITE NAME LIKE 64090-FELIX-F239
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

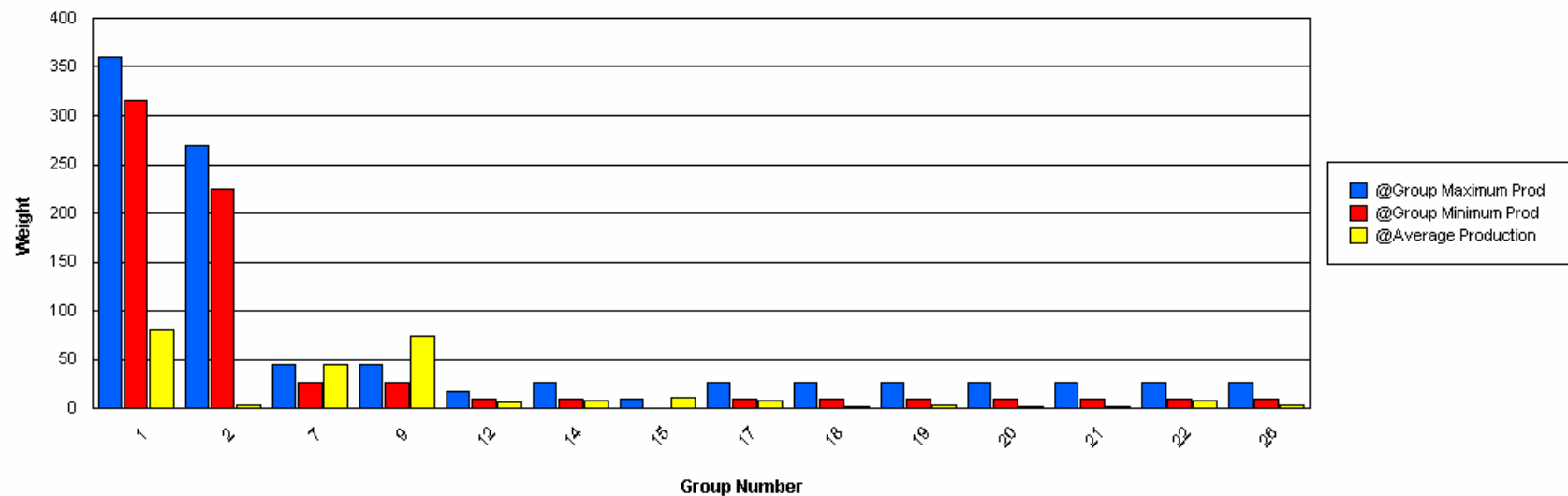
Functional / Structural Groups

Report Parameters

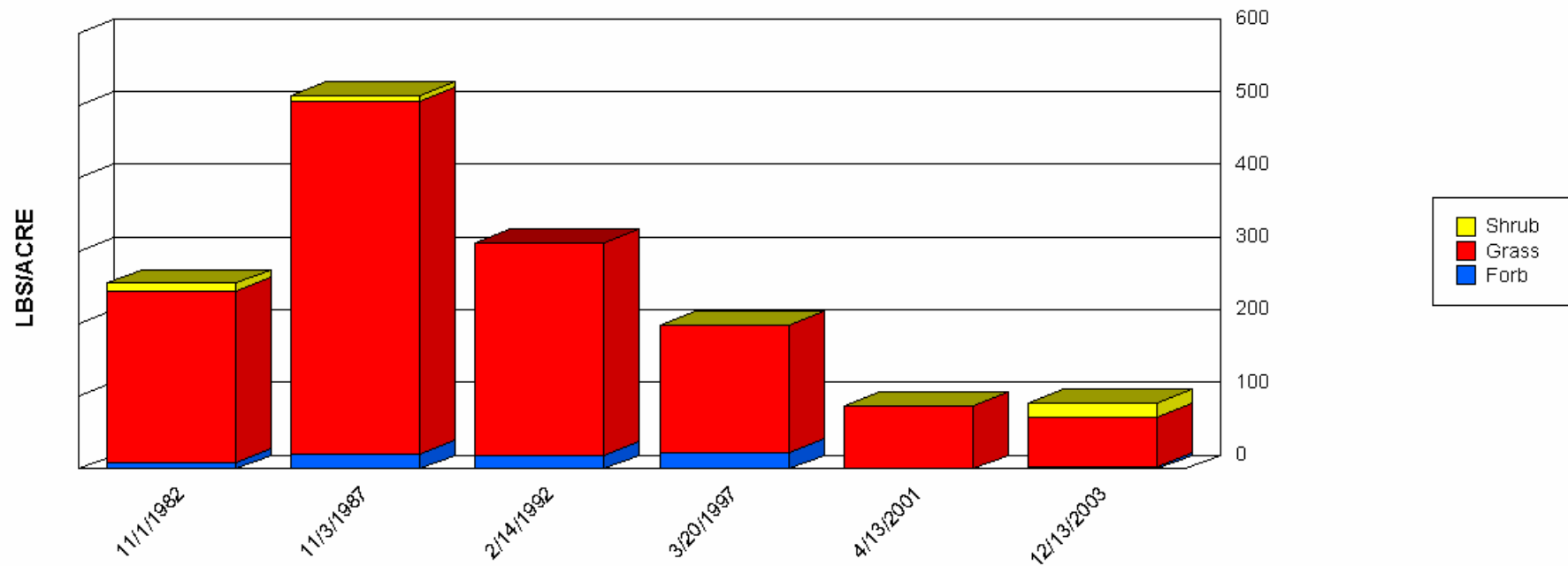
SITE NAME LIKE 64090-FELIX-F239
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004
 MIN LBS TO GRAPH 1
 SELECTED ECOSITE 042CY007NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	HIMU2	315	360	19.14	45.00	33.90	9.52
1	Grass	SCBR2	315	360	18.39	68.40	47.10	19.48
2	Grass	BOER4	225	270	0.00	14.93	4.23	6.23
3	Grass	BOCU	9	27	0.00	1.90	0.48	0.82
7	Grass	ARIST	27	45	0.00	107.79	28.28	41.83
7	Grass	SPCR	27	45	0.00	39.56	16.14	16.94
8	Grass	PAOB	9	27	0.00	4.00	0.80	1.60
9	Grass	MUAR	27	45	0.00	9.00	2.91	3.32
9	Grass	MUAR2	27	45	0.00	183.39	71.59	67.76
12	Grass	PAHA	9	18	0.00	27.52	5.98	10.78
14	Grass	TRMU	9	27	0.00	39.10	7.56	14.22
15	Grass	TRPI2	0	9	0.00	30.16	10.46	13.47
17	Grass	ERPU8	9	27	0.00	15.30	3.43	5.97
17	Grass	LYPH	9	27	0.00	14.40	3.60	6.24
17	Grass	SCPA	9	27	0.00	3.56	1.19	1.68
17	Grass	SPFL2	9	27	0.00	2.19	0.44	0.87
18	Forb	SPHAE	9	27	0.00	5.33	1.78	2.51
19	Forb	CROTO	9	27	0.00	7.00	2.82	2.55
19	Forb	PENA	9	27	0.00	0.55	0.11	0.22
20	Forb	PLANT	9	27	0.00	4.00	1.33	1.89
21	Forb	ERTE13	9	27	0.00	6.00	1.74	2.19
22	Forb	AAFF	9	27	0.00	17.36	4.98	6.42
22	Forb	CIRSI	9	27	0.00	5.68	1.89	2.68
22	Forb	NICOT	9	27	0.00	0.57	0.19	0.27
22	Forb	PORTU	9	27	0.00	2.00	0.67	0.94
24	Forb	EUPHO	9	27	0.00	0.73	0.15	0.29

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
26	Shrub	GUSA2	9	27	0.00	10.12	3.22	4.15
26	Shrub	OPUNT	9	27	0.00	0.67	0.22	0.31



Production Lbs/Acre Trends

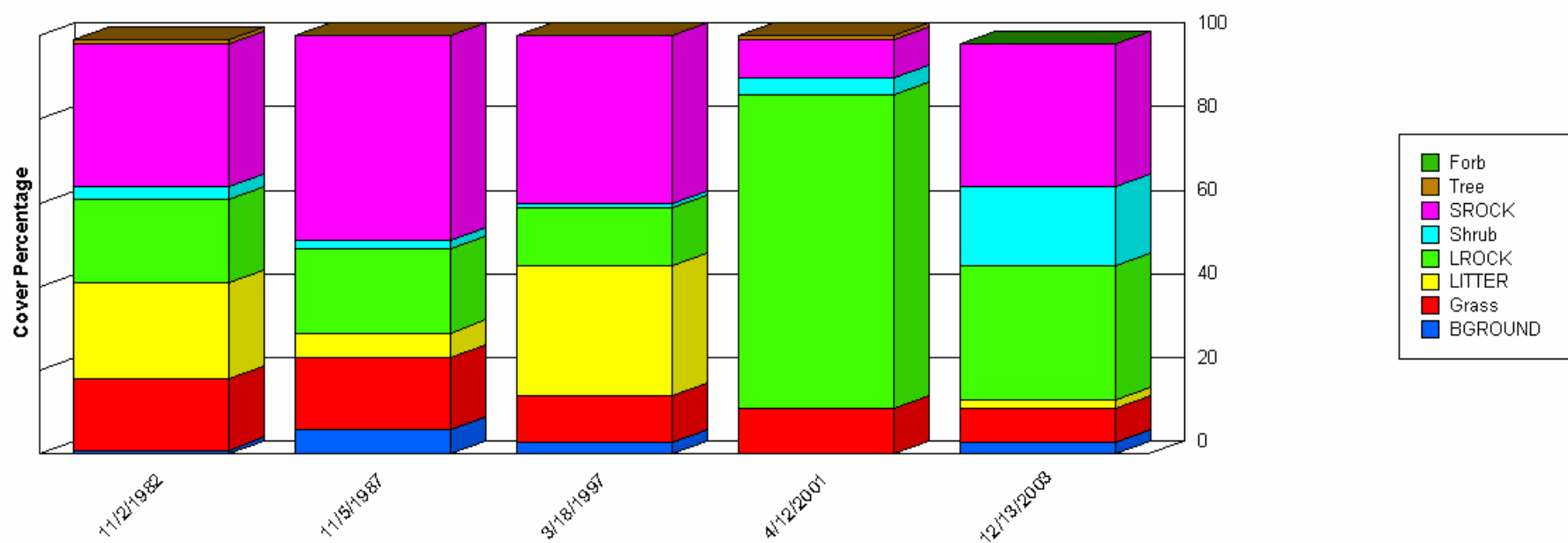


	11/1/1982	11/3/1987	2/14/1992	3/20/1997	4/13/2001	12/13/2003
Forb	8.30	21.19	19.00	21.98	0.00	2.52
Grass	237.17	485.31	293.00	176.48	86.00	68.85
Shrub	10.12	6.64	0.00	0.00	0.00	20.00
Total	255.59	513.13	312.00	198.46	86.00	91.37

Report Parameters

SITE NAME LIKE 64090-FELIX-F239
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

Ground Cover Trends



	11/2/1982	11/5/1987	3/18/1997	4/12/2001	12/13/2003
BGROUND	1.00	6.00	3.00	0.00	3.00
Forb	0.00	0.00	0.00	0.00	0.00
Grass	17.00	17.00	11.00	11.00	8.00
LITTER	23.00	6.00	31.00	0.00	2.00
LROCK	20.00	20.00	14.00	75.00	32.00
Shrub	3.00	2.00	1.00	4.00	19.00
SROCK	34.00	49.00	40.00	9.00	34.00

	11/2/1982	11/5/1987	3/18/1997	4/12/2001	12/13/2003
Tree	1.00	0.00	0.00	1.00	0.00
Total	99.00	100.00	100.00	100.00	98.00

Report Parameters

SITE NAME LIKE 64090-HORSESHOE-F234
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

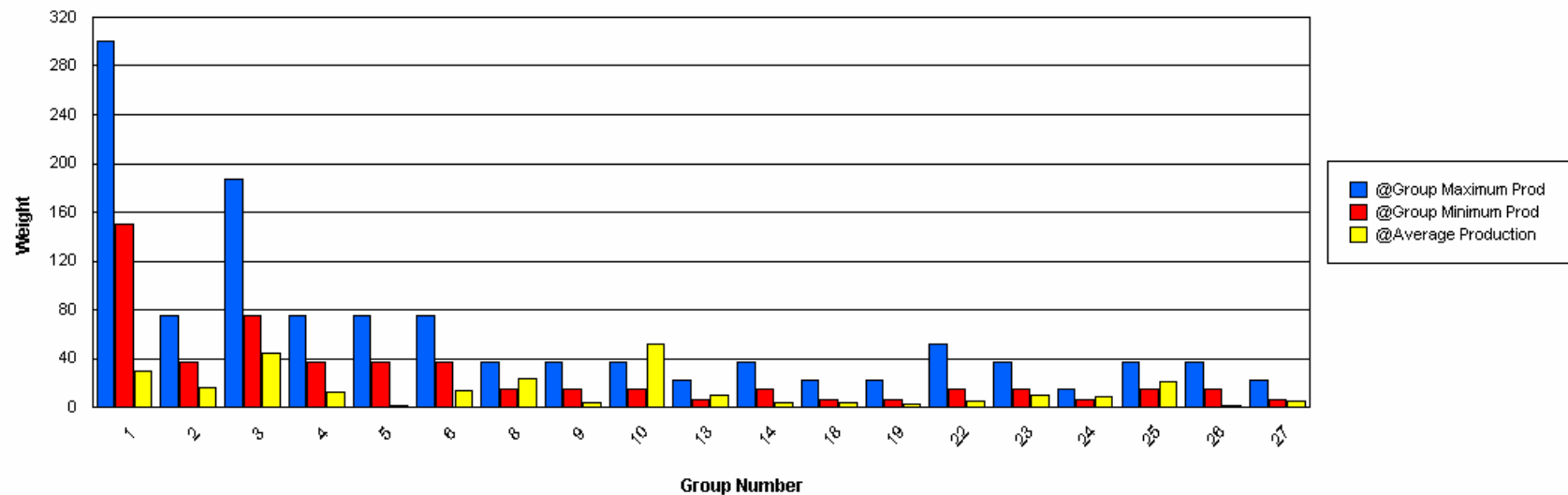
Functional / Structural Groups

Report Parameters

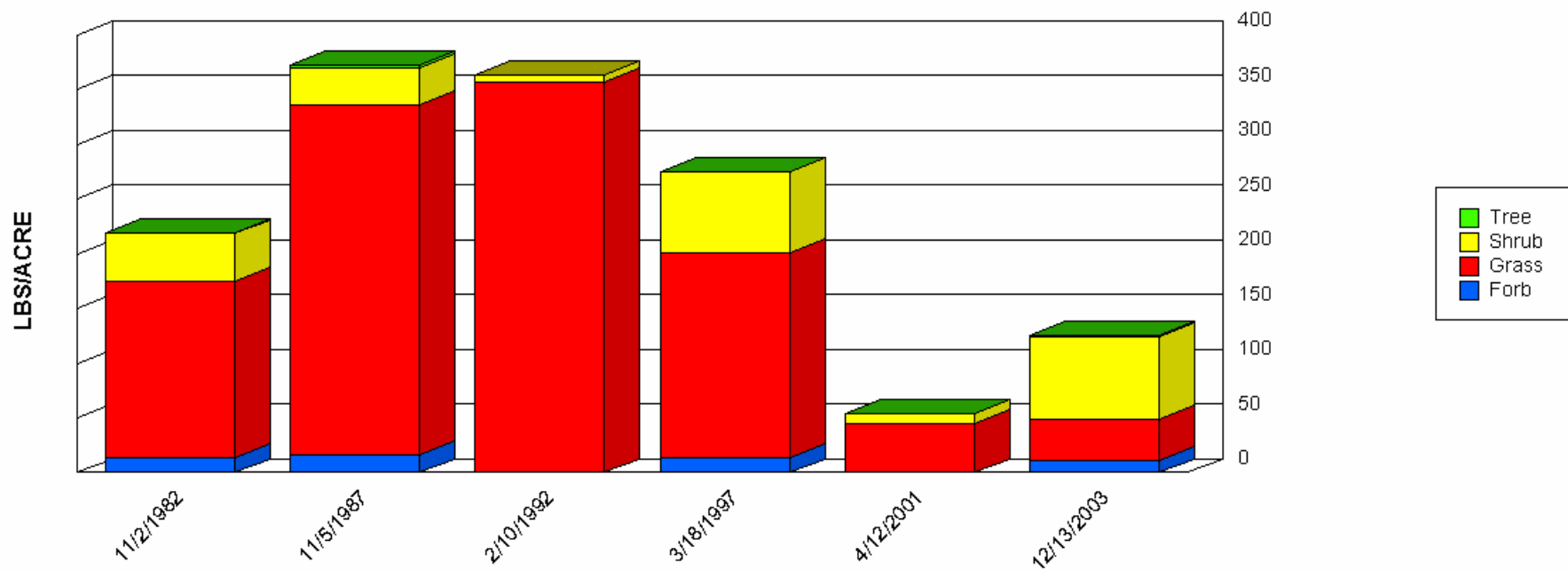
SITE NAME LIKE 64090-HORSESHOE-F234
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004
 MIN LBS TO GRAPH 1
 SELECTED ECOSITE 070DY158NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	BOER4	150	300	13.00	56.00	29.49	17.28
2	Grass	BOCU	37	75	3.36	49.30	15.83	17.52
3	Grass	TRIDE	75	187	0.00	52.00	20.39	22.66
3	Grass	TRMU	75	187	0.00	12.04	6.42	4.71
3	Grass	TRPI2	75	187	0.00	51.30	18.02	21.31
4	Grass	BOGR2	37	75	0.00	30.00	11.96	13.54
4	Grass	SPCR	37	75	0.00	0.84	0.28	0.40
5	Grass	MUTO2	37	75	0.00	5.04	1.26	2.18
6	Grass	ARIST	37	75	0.00	25.60	13.63	9.22
8	Grass	LYPH	15	37	0.00	67.65	24.25	26.37
9	Grass	PAHA	15	37	0.00	20.00	3.85	7.26
10	Grass	BOHI2	15	37	0.00	88.00	35.78	29.26
10	Grass	ERPU8	15	37	0.00	1.70	0.34	0.68
10	Grass	LEDU	15	37	0.00	54.60	15.52	22.77
13	Grass	ENDE	7	22	0.00	14.17	2.83	5.67
13	Grass	LECO	7	22	0.00	19.51	6.04	7.90
13	Grass	MUHLE	7	22	0.00	2.83	0.94	1.34
14	Forb	CROTO	15	37	0.00	4.67	1.92	1.84
14	Forb	ERIOG	15	37	0.00	4.40	1.49	1.62
15	Forb	SENEC	7	37	0.00	1.44	0.48	0.68
16	Forb	PECTI	7	22	0.00	2.93	0.95	1.21
17	Forb	PLANT	7	22	0.00	0.30	0.10	0.14
18	Forb	AAFF	7	22	0.00	8.68	3.00	3.55
18	Forb	PORTU	7	22	0.00	2.00	0.67	0.94
18	Forb	TRAGI	7	22	0.00	0.90	0.30	0.42
19	Forb	AMBRO	7	22	0.00	6.60	1.32	2.64

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
19	Forb	CASSI	7	22	0.00	0.33	0.07	0.13
19	Forb	PPFF	7	22	0.00	2.29	1.46	1.04
19	Forb	TRAM9	7	22	0.00	0.37	0.07	0.15
22	Shrub	NOLIN	15	52	0.00	14.00	4.67	6.60
23	Shrub	YUCCA	15	37	0.00	40.00	10.00	17.32
24	Shrub	OPUNT	7	15	0.00	22.00	8.33	8.62
25	Shrub	GUSA2	15	37	0.00	63.36	21.13	24.00
26	Shrub	DAFO	15	37	0.00	2.03	0.60	0.75
26	Forb	KRAME2	15	37	0.00	0.38	0.10	0.16
26	Shrub	RHMI3	15	37	0.00	1.22	0.41	0.58
27	Shrub	ACACI	7	22	0.00	2.00	0.67	0.94
27	Tree	ACGR	7	22	0.00	2.00	0.91	0.79
27	Shrub	ALWR	7	22	0.00	12.74	3.32	5.44



Production Lbs/Acre Trends

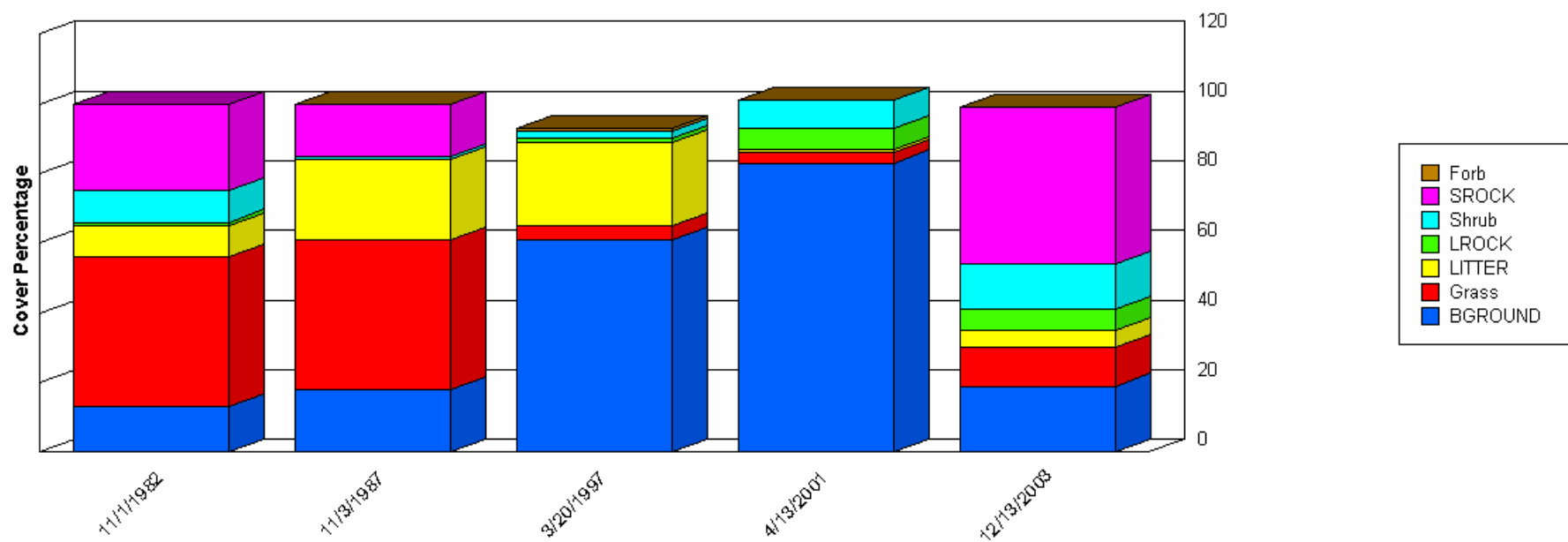


	11/2/1982	11/5/1987	2/10/1992	3/18/1997	4/12/2001	12/13/2003
Forb	13.69	16.34	0.00	13.46	0.00	10.71
Grass	160.69	319.85	357.00	187.24	44.46	38.53
Shrub	44.09	33.95	7.00	74.74	9.33	74.87
Tree	1.20	2.00	0.00	0.00	0.00	1.33
Total	219.67	372.14	364.00	275.44	53.79	125.45

Report Parameters

SITE NAME LIKE 64090-HORSESHOE-F234
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

Ground Cover Trends



	11/1/1982	11/3/1987	3/20/1997	4/13/2001	12/13/2003
BGROUND	13.00	18.00	61.00	83.00	19.00
Forb	0.00	0.00	1.00	0.00	0.00
Grass	43.00	43.00	4.00	3.00	11.00
LITTER	9.00	23.00	24.00	1.00	5.00
LROCK	1.00	0.00	1.00	6.00	6.00
Shrub	9.00	1.00	2.00	8.00	13.00
SROCK	25.00	15.00	0.00	0.00	45.00

	11/1/1982	11/3/1987	3/20/1997	4/13/2001	12/13/2003
Total	100.00	100.00	93.00	101.00	99.00

Report Parameters

SITE NAME LIKE 64090-INDIAN BLUFF-F238
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

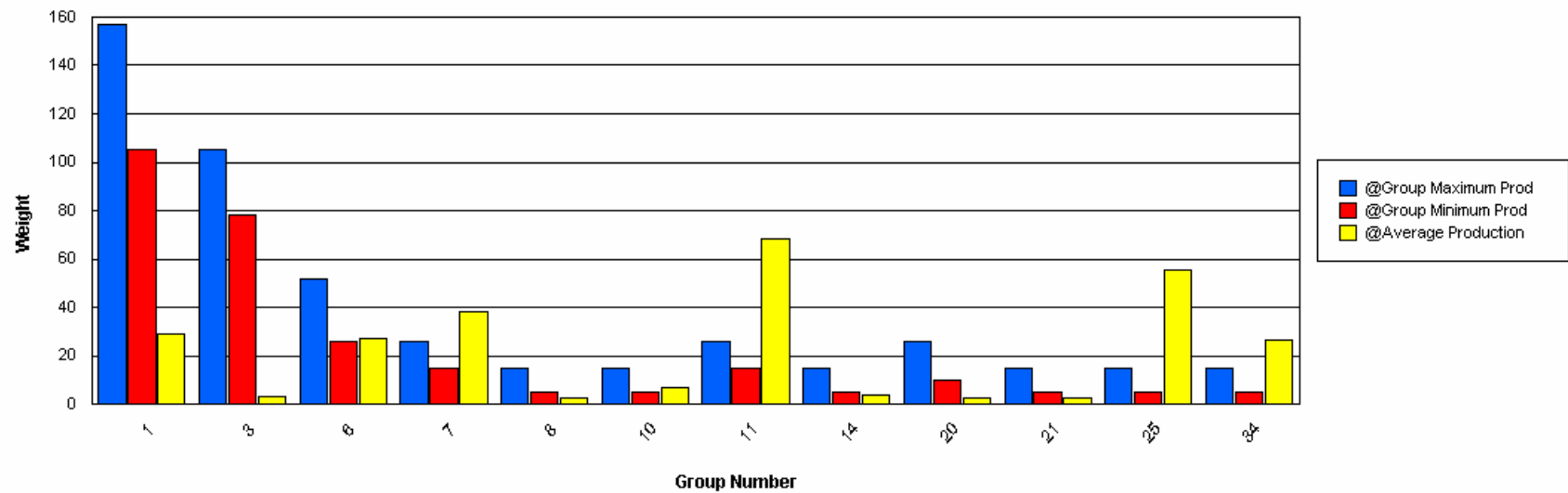
Functional / Structural Groups

Report Parameters

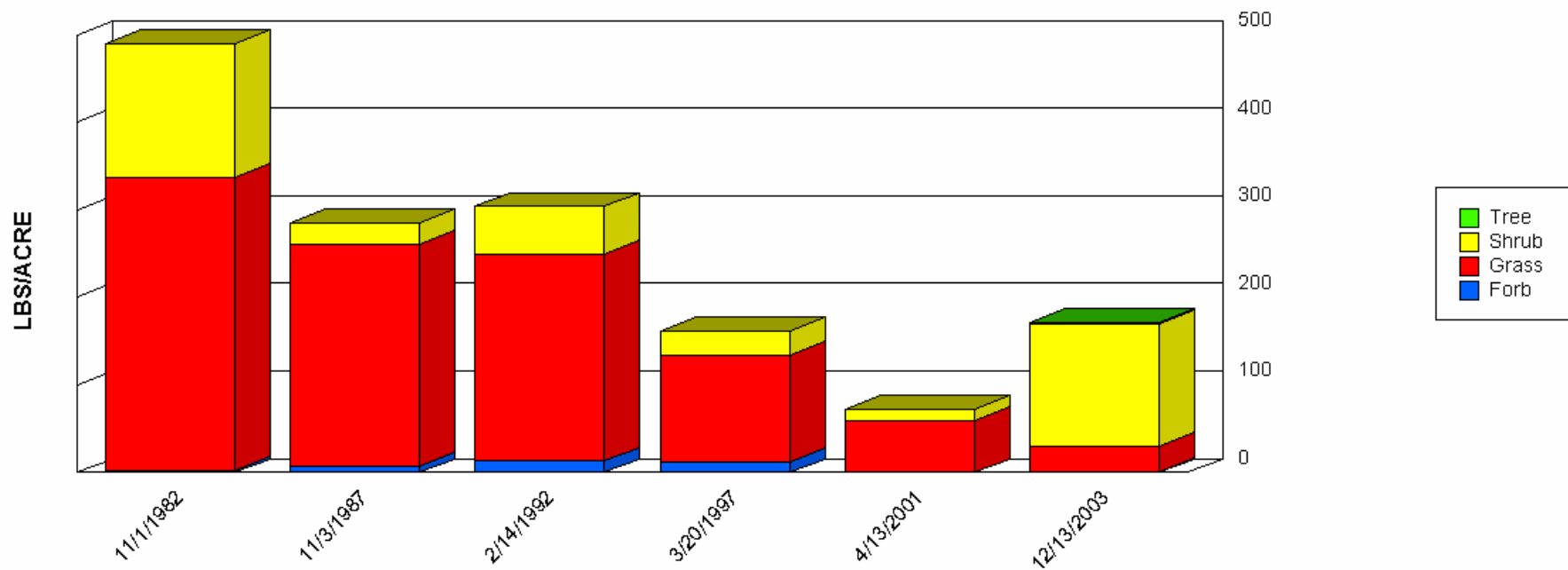
SITE NAME LIKE 64090-INDIAN BLUFF-F238
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004
 MIN LBS TO GRAPH 1
 SELECTED ECOSITE 042CY025NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	BOER4	105	157	2.55	48.00	28.78	14.97
3	Grass	BOGR2	78	105	0.00	18.00	3.49	6.52
6	Grass	SPCR	26	52	0.00	56.85	27.18	26.15
7	Grass	TRMU	15	26	0.00	65.10	28.02	26.57
7	Grass	TRPI2	15	26	0.00	39.42	10.27	13.91
8	Grass	MUAR	5	15	0.00	6.47	2.43	2.50
10	Grass	ERPU8	5	15	0.00	20.97	6.93	8.00
11	Grass	ARIST	15	26	0.00	20.40	7.60	8.44
11	Grass	HIMU2	15	26	5.57	27.84	15.81	7.40
11	Grass	MUAR2	15	26	0.00	66.36	29.24	25.41
11	Grass	SCBR2	15	26	5.00	36.99	15.56	10.19
14	Grass	LYPH	5	15	0.00	14.40	3.60	6.24
17	Forb	SPHAE	5	15	0.00	2.40	0.80	1.13
20	Forb	CROTO	10	26	0.00	6.00	2.74	2.13
21	Forb	AAFF	5	15	0.00	7.00	2.51	2.91
21	Forb	PECTI	5	15	0.00	0.37	0.07	0.15
21	Forb	PLANT	5	15	0.00	0.30	0.10	0.14
21	Forb	PORTU	5	15	0.00	0.30	0.10	0.14
22	Forb	PPFF	5	15	0.00	1.76	0.44	0.76
22	Forb	TRAM9	5	15	0.00	0.37	0.07	0.15
25	Shrub	LADI2	5	15	0.00	45.23	14.54	20.58
25	Shrub	LATR2	5	15	1.06	123.39	41.07	48.43
32	Shrub	OPUNT	5	15	0.00	0.29	0.06	0.12
34	Shrub	GUSA2	5	15	0.00	105.80	26.50	36.53

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
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Production Lbs/Acre Trends

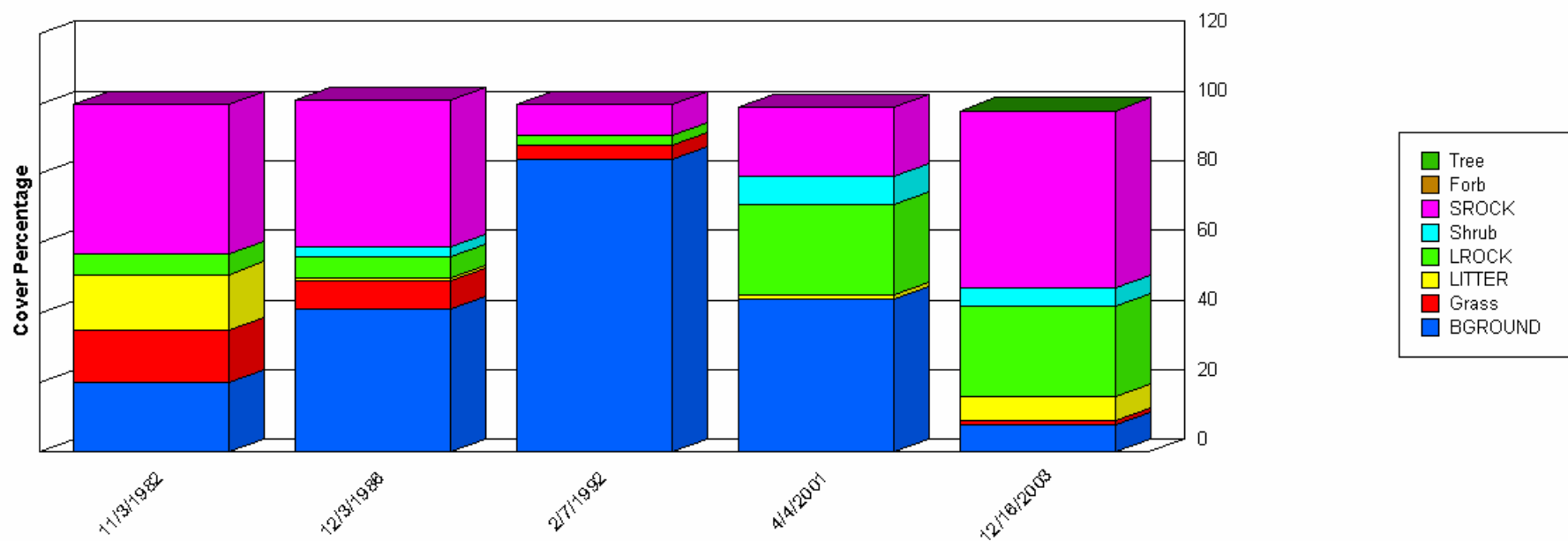


	11/1/1982	11/3/1987	2/14/1992	3/20/1997	4/13/2001	12/13/2003
Forb	2.37	6.60	13.00	11.58	0.00	0.93
Grass	335.68	253.57	237.00	122.18	59.71	28.69
Shrub	151.33	25.70	54.00	27.36	12.48	139.95
Tree	0.00	0.00	0.00	0.00	0.00	2.00
Total	489.37	285.87	304.00	161.12	72.19	171.58

Report Parameters

SITE NAME LIKE 64090-INDIAN BLUFF-F238
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

Ground Cover Trends



	11/3/1982	12/3/1986	2/7/1992	4/4/2001	12/16/2003
BGROUND	20.00	41.00	84.00	44.00	8.00
Forb	0.00	0.00	0.00	0.00	0.00
Grass	15.00	8.00	4.00	0.00	1.00
LITTER	16.00	1.00	0.00	1.00	7.00
LROCK	6.00	6.00	3.00	26.00	26.00
Shrub	0.00	3.00	0.00	8.00	5.00
SROCK	43.00	42.00	9.00	20.00	51.00

	11/3/1982	12/3/1986	2/7/1992	4/4/2001	12/16/2003
Tree	0.00	0.00	0.00	0.00	0.00
Total	100.00	101.00	100.00	99.00	98.00

Report Parameters

SITE NAME LIKE 64090-N CAMP WELL-F227
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

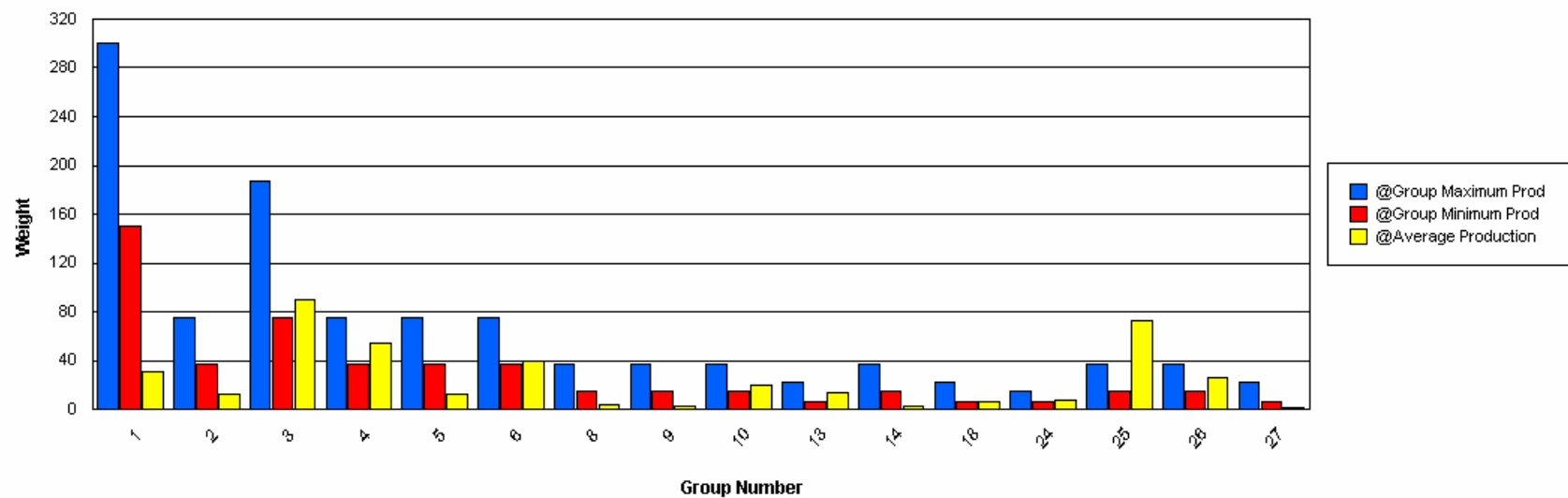
Functional / Structural Groups

Report Parameters

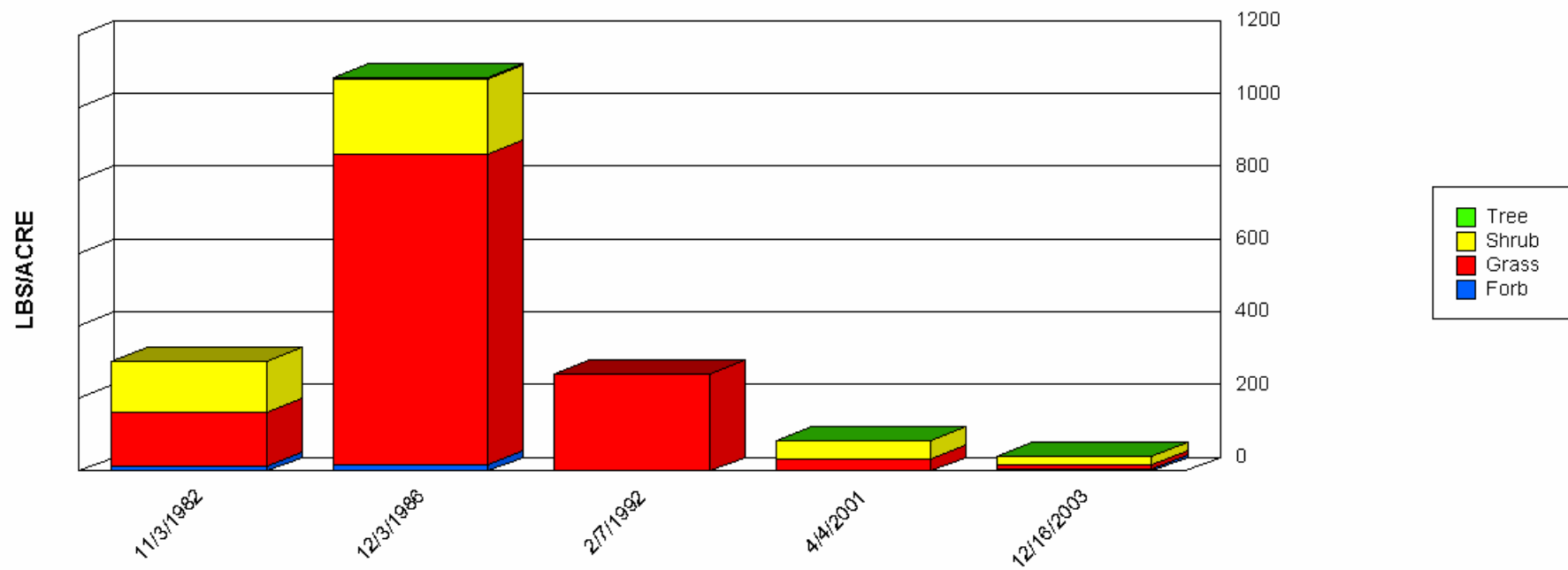
SITE NAME LIKE 64090-N CAMP WELL-F227
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004
 MIN LBS TO GRAPH 1
 SELECTED ECOSITE 070DY158NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	BOER4	150	300	1.42	96.88	30.71	35.25
2	Grass	BOCU	37	75	0.00	47.00	12.75	19.84
3	Grass	TRMU	75	187	0.00	219.33	53.23	83.68
3	Grass	TRPI2	75	187	0.00	78.00	36.69	31.64
4	Grass	BOGR2	37	75	0.00	183.33	48.97	77.73
4	Grass	SPCR	37	75	0.00	17.46	5.82	8.23
5	Grass	SCBR2	37	75	0.00	40.39	13.17	16.39
6	Grass	ARIST	37	75	0.00	107.15	39.44	41.23
8	Grass	LYPH	15	37	0.00	9.00	4.34	3.70
9	Grass	PAHA	15	37	0.00	7.63	2.62	3.02
10	Grass	BOHI2	15	37	0.00	40.00	14.29	14.99
10	Grass	ERPU8	15	37	0.00	6.00	2.33	2.86
10	Grass	HIMU2	15	37	0.00	6.27	2.83	2.86
13	Grass	MUAR2	7	22	0.00	20.91	8.78	8.00
13	Grass	PAOB	7	22	0.00	16.67	5.56	7.86
14	Forb	CROTO	15	37	0.00	4.57	1.61	1.87
14	Forb	ERIOG	15	37	0.00	3.30	1.07	1.35
15	Forb	SELO	7	37	0.00	0.44	0.15	0.21
18	Forb	AAFF	7	22	0.00	17.28	5.76	8.15
18	Forb	DYPE	7	22	0.00	0.49	0.21	0.22
18	Forb	EUPHO	7	22	0.00	1.47	0.37	0.64
18	Forb	GALIU	7	22	0.00	0.73	0.18	0.32
19	Forb	CASSI	7	22	0.00	0.33	0.08	0.14
19	Forb	HOFFM	7	22	0.00	0.29	0.07	0.13
19	Forb	LEER	7	22	0.00	2.57	0.64	1.11
22	Shrub	NOLIN	15	52	0.00	0.42	0.11	0.18

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
23	Shrub	YUCCA	15	37	0.00	0.20	0.07	0.09
24	Shrub	OPUNT	7	15	0.00	17.75	7.77	7.93
25	Shrub	GUSA2	15	37	20.16	158.33	73.09	54.61
26	Shrub	DAFO	15	37	1.16	6.27	3.71	2.55
26	Shrub	KRAME	15	37	0.00	48.10	13.67	20.06
26	Shrub	LADI2	15	37	0.00	34.61	8.65	14.99
27	Tree	ACGR	7	22	0.00	4.27	1.42	2.01



Production Lbs/Acre Trends

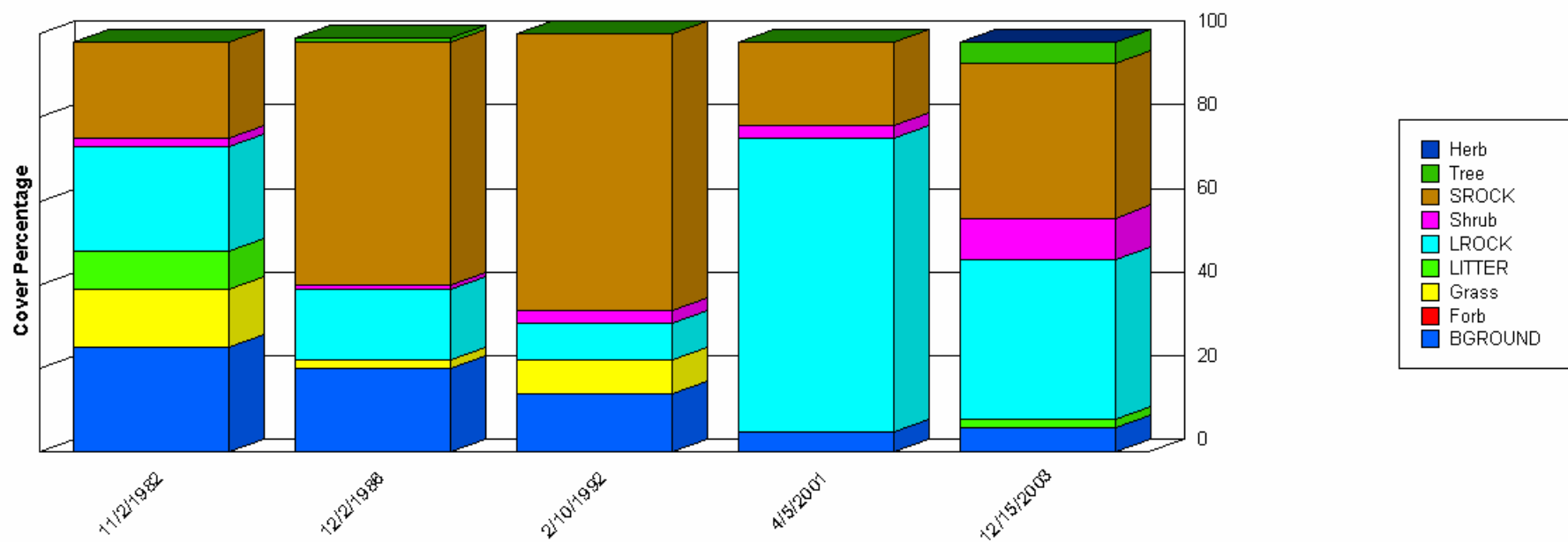


	11/3/1982	12/3/1986	2/7/1992	4/4/2001	12/16/2003
Forb	13.63	18.68	0.00	0.00	5.40
Grass	148.35	852.03	268.00	31.58	11.94
Shrub	142.14	206.63	0.00	50.67	25.32
Tree	0.00	4.27	0.00	0.00	0.00
Total	304.11	1,081.61	268.00	82.25	42.65

Report Parameters

SITE NAME LIKE 64090-N CAMP WELL-F227
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

Ground Cover Trends



	11/2/1982	12/2/1986	2/10/1992	4/5/2001	12/15/2003
BGROUND	25.00	20.00	14.00	5.00	6.00
Forb	0.00	0.00	0.00	0.00	0.00
Grass	14.00	2.00	8.00	0.00	0.00
Herb	0.00	0.00	0.00	0.00	0.00
LITTER	9.00	0.00	0.00	0.00	2.00
LROCK	25.00	17.00	9.00	70.00	38.00
Shrub	2.00	1.00	3.00	3.00	10.00
SROCK	23.00	58.00	56.00	15.00	39.00
Tree	0.00	0.00	0.00	0.00	2.00

	11/2/1982	12/2/1986	2/10/1992	4/5/2001	12/15/2003
SROCK	23.00	58.00	66.00	20.00	37.00
Tree	0.00	1.00	0.00	0.00	5.00
Total	98.00	99.00	100.00	98.00	98.00

Report Parameters

SITE NAME LIKE 64090-S CAMP WELL-F228
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

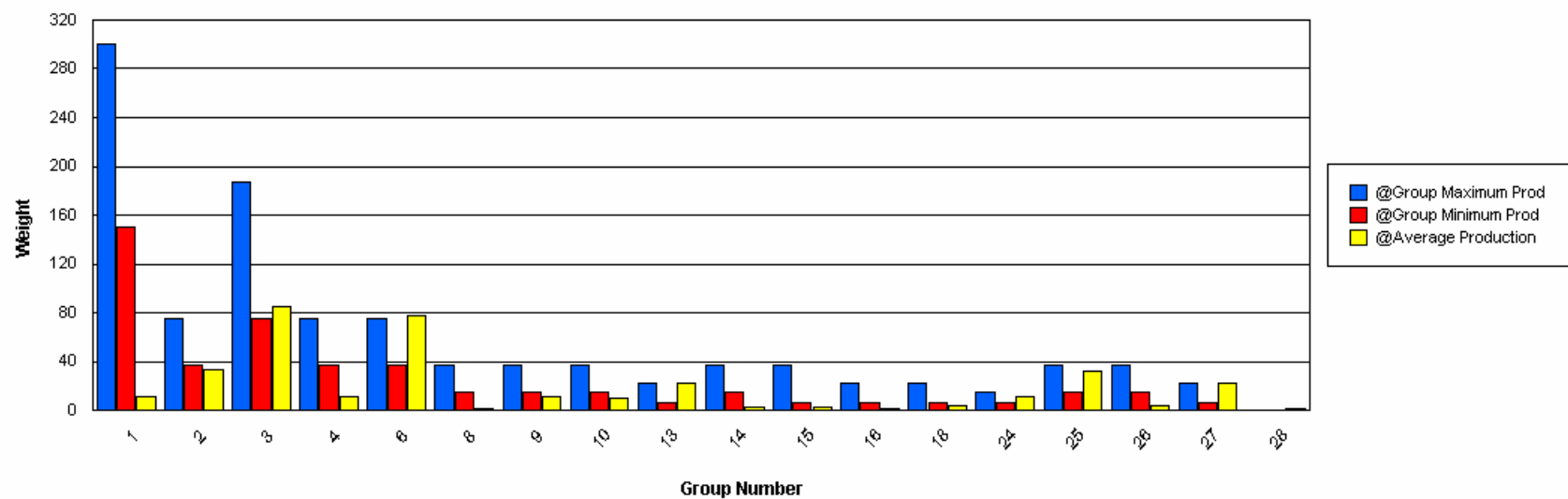
Functional / Structural Groups

Report Parameters

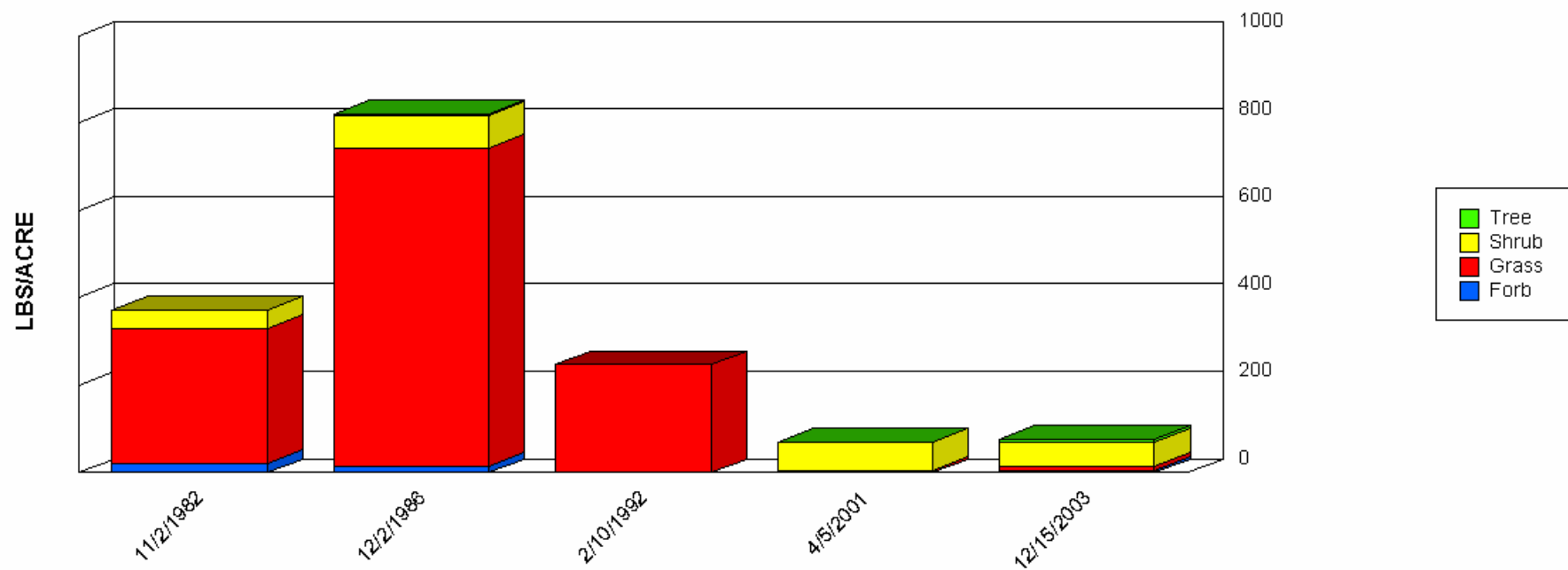
SITE NAME LIKE 64090-S CAMP WELL-F228
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004
 MIN LBS TO GRAPH 1
 SELECTED ECOSITE 070DY158NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	BOER4	150	300	0.00	28.00	11.91	11.86
2	Grass	BOCU	37	75	0.00	87.11	33.42	34.42
3	Grass	TRMU	75	187	0.00	142.25	41.42	53.74
3	Grass	TRPI2	75	187	0.00	79.38	43.09	35.89
4	Grass	BOGR2	37	75	0.00	37.33	10.70	15.47
4	Grass	SPCR	37	75	0.00	3.23	1.08	1.52
6	Grass	ARIST	37	75	0.00	294.65	77.70	110.89
8	Grass	LYPH	15	37	0.00	5.87	1.74	2.42
9	Grass	PAHA	15	37	0.00	42.00	11.45	15.74
10	Grass	ERPU8	15	37	0.00	2.64	0.88	1.24
10	Grass	HIMU2	15	37	0.00	5.07	2.43	2.43
10	Grass	LEDU	15	37	0.00	18.80	6.27	8.86
13	Grass	ENDE	7	22	0.00	0.59	0.15	0.26
13	Grass	LECO	7	22	0.00	9.41	3.14	4.43
13	Grass	MUAR2	7	22	0.00	45.82	18.78	18.95
14	Forb	CROTO	15	37	0.00	5.23	2.18	2.27
14	Forb	ERIOG	15	37	0.00	1.10	0.28	0.48
15	Forb	SELO	7	37	0.00	5.50	2.38	2.43
16	Forb	PEPA2	7	22	0.00	4.40	1.10	1.91
17	Forb	SPAN3	7	22	0.00	0.31	0.08	0.14
17	Forb	SPCO	7	22	0.00	0.31	0.08	0.14
18	Forb	AAFF	7	22	0.00	9.18	3.12	4.28
18	Forb	BOERH2	7	22	0.00	0.73	0.18	0.32
18	Forb	EUPHO	7	22	0.00	1.83	0.46	0.79
18	Forb	FROEL	7	22	0.00	0.37	0.09	0.16
19	Forb	DALEA3	7	22	0.00	1.10	0.28	0.48

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
19	Forb	TRAM9	7	22	0.00	1.83	0.46	0.79
24	Shrub	OPUNT	7	15	0.00	22.67	11.33	11.33
25	Shrub	GUSA2	15	37	0.00	70.98	32.57	25.97
26	Shrub	DAFO	15	37	0.00	3.54	1.14	1.40
26	Shrub	RHAR4	15	37	0.00	6.07	3.03	3.03
27	Shrub	ACCO2	7	22	0.00	33.33	16.67	16.67
27	Tree	ACGR	7	22	0.00	8.33	4.20	3.40
27	Shrub	BRICK	7	22	0.00	3.72	1.86	1.86
28	Shrub	PRGL2	0	0	0.00	3.67	1.22	1.73



Production Lbs/Acre Trends

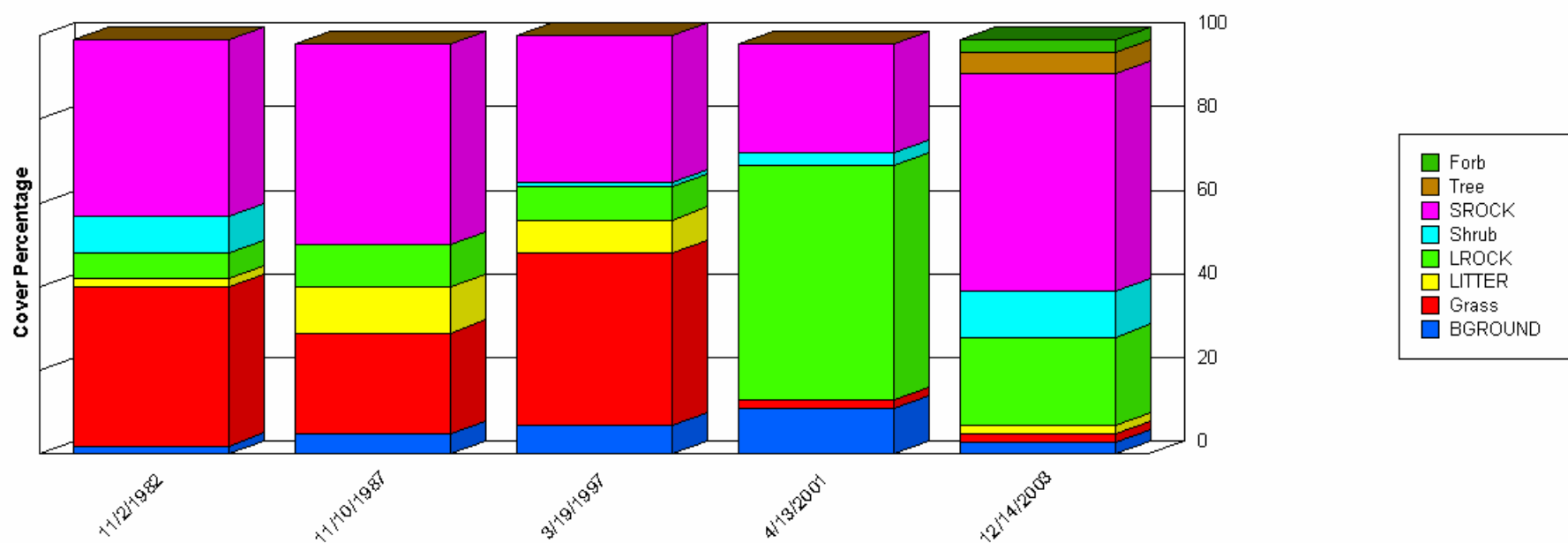


	11/2/1982	12/2/1986	2/10/1992	4/5/2001	12/15/2003
Forb	21.22	14.68	0.00	0.00	5.96
Grass	308.86	727.00	247.00	4.64	9.58
Shrub	41.72	75.08	0.00	65.79	53.80
Tree	0.00	4.27	0.00	0.00	8.33
Total	371.80	821.03	247.00	70.43	77.68

Report Parameters

SITE NAME LIKE 64090-S CAMP WELL-F228
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

Ground Cover Trends



	11/2/1982	11/10/1987	3/19/1997	4/13/2001	12/14/2003
BGROUND	2.00	5.00	7.00	11.00	3.00
Forb	0.00	0.00	0.00	0.00	3.00
Grass	38.00	24.00	41.00	2.00	2.00
LITTER	2.00	11.00	8.00	0.00	2.00
LROCK	6.00	10.00	8.00	56.00	21.00
Shrub	9.00	0.00	1.00	3.00	11.00
SROCK	42.00	48.00	35.00	26.00	52.00

	11/2/1982	11/10/1987	3/19/1997	4/13/2001	12/14/2003
Tree	0.00	0.00	0.00	0.00	5.00
Total	99.00	98.00	100.00	98.00	99.00

Report Parameters

SITE NAME LIKE 64090-SIXTEEN-F235
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

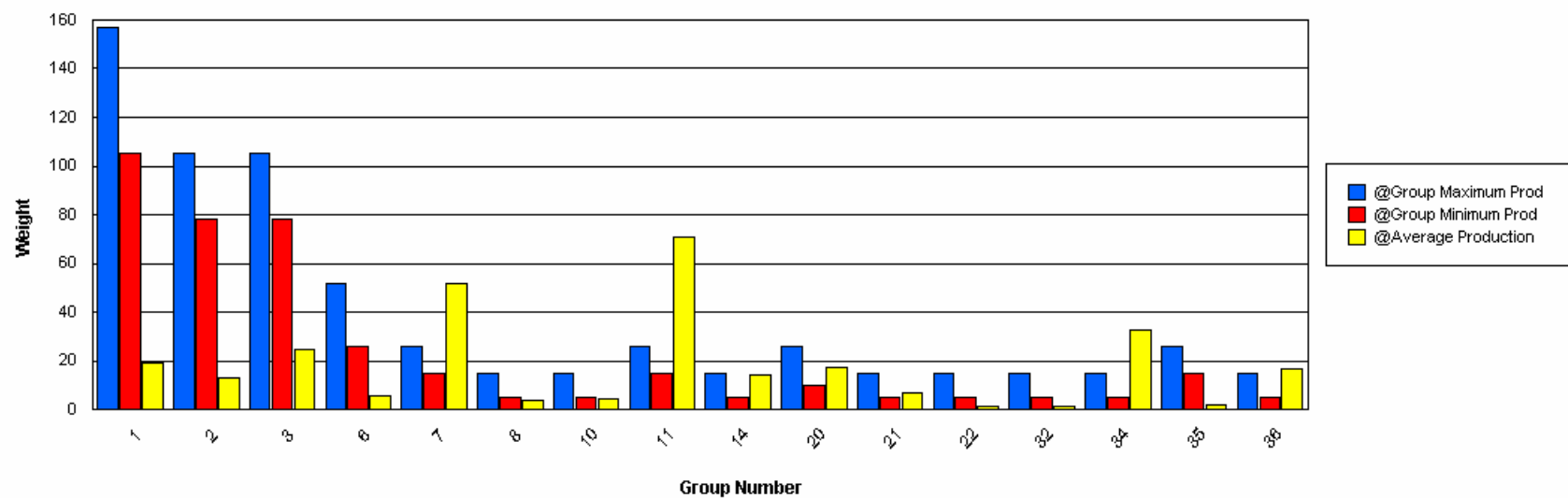
Functional / Structural Groups

Report Parameters

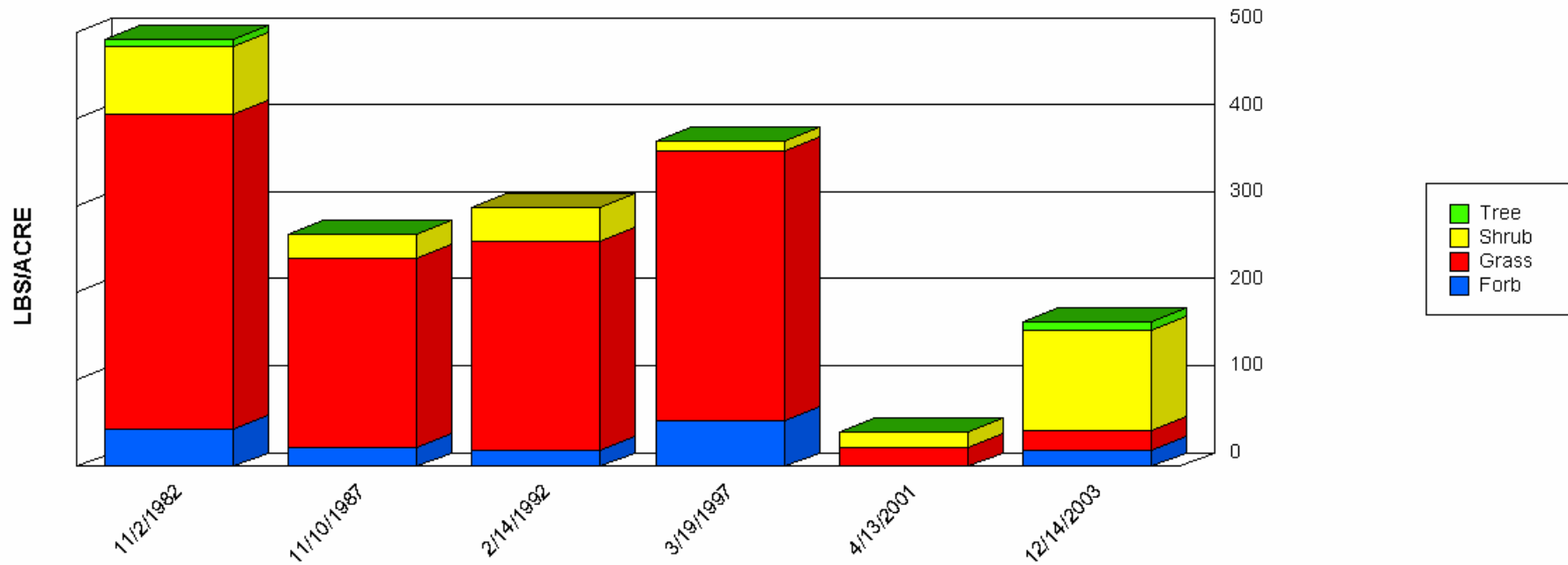
SITE NAME LIKE 64090-SIXTEEN-F235
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004
 MIN LBS TO GRAPH 1
 SELECTED ECOSITE 042CY025NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	BOER4	105	157	1.70	40.80	19.34	15.94
2	Grass	BOCU	78	105	0.00	29.00	13.02	11.71
3	Grass	BOGR2	78	105	0.00	19.20	4.20	7.53
3	Grass	BOHI2	78	105	0.00	42.00	20.63	16.76
6	Grass	SPCR	26	52	0.00	14.56	5.51	6.77
7	Grass	TRIDE	15	26	0.00	7.45	3.73	3.73
7	Grass	TRMU	15	26	0.00	47.12	11.74	16.66
7	Grass	TRPI2	15	26	0.00	144.18	36.39	49.72
8	Grass	MUAR	5	15	0.00	18.48	3.93	7.29
10	Grass	ERPU8	5	15	0.00	14.00	4.34	4.73
11	Grass	ARIST	15	26	0.00	102.77	39.41	39.58
11	Grass	BOSA	15	26	0.00	8.90	2.97	4.20
11	Grass	HIMU2	15	26	0.57	22.29	10.51	8.99
11	Grass	MUAR2	15	26	0.00	32.13	10.61	10.98
11	Grass	SCBR2	15	26	0.00	22.00	7.52	9.06
14	Grass	ENDE	5	15	0.00	0.60	0.20	0.28
14	Grass	LECO	5	15	0.00	2.97	0.59	1.19
14	Grass	LEDU	5	15	0.00	2.89	0.75	1.12
14	Grass	LYPH	5	15	0.00	27.00	5.80	10.63
14	Grass	PAHA	5	15	0.00	17.21	6.83	7.81
17	Forb	SPHAE	5	15	0.00	1.20	0.39	0.50
20	Forb	CROTO	10	26	0.00	51.84	14.93	17.04
20	Forb	ERIOG	10	26	0.00	7.80	2.73	3.40
21	Forb	AAFF	5	15	0.00	4.00	2.00	1.27
21	Forb	EUPHO	5	15	0.00	4.40	0.88	1.76
21	Forb	PECTI	5	15	0.00	10.27	2.05	4.11

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
21	Forb	STEPH	5	15	0.00	6.60	1.32	2.64
21	Forb	TRAGI	5	15	0.00	1.20	0.40	0.57
22	Forb	DEVE2	5	15	0.00	2.57	0.51	1.03
22	Forb	DYPE2	5	15	0.00	0.81	0.27	0.38
22	Forb	HOGL2	5	15	0.00	0.30	0.10	0.14
22	Forb	TRAM9	5	15	0.00	3.67	0.73	1.47
23	Forb	CIRSI	0	0	0.00	1.10	0.22	0.44
32	Shrub	OPUNT	5	15	0.00	3.33	1.18	1.30
34	Shrub	GUSA2	5	15	0.00	90.24	32.46	35.44
35	Shrub	EULA5	15	26	0.00	5.80	1.93	2.73
36	Shrub	ACACI	5	15	0.00	14.00	6.00	5.93
36	Shrub	ACCO2	5	15	0.00	5.33	2.67	2.67
36	Tree	ACGR	5	15	0.00	10.00	3.52	4.38
36	Shrub	AGAVE	5	15	0.00	10.00	2.61	3.82
36	Shrub	ALWR	5	15	0.00	0.35	0.12	0.17
36	Shrub	DAFO	5	15	0.00	3.76	1.53	1.50
36	Shrub	ERLA12	5	15	0.00	1.25	0.25	0.50



Production Lbs/Acre Trends

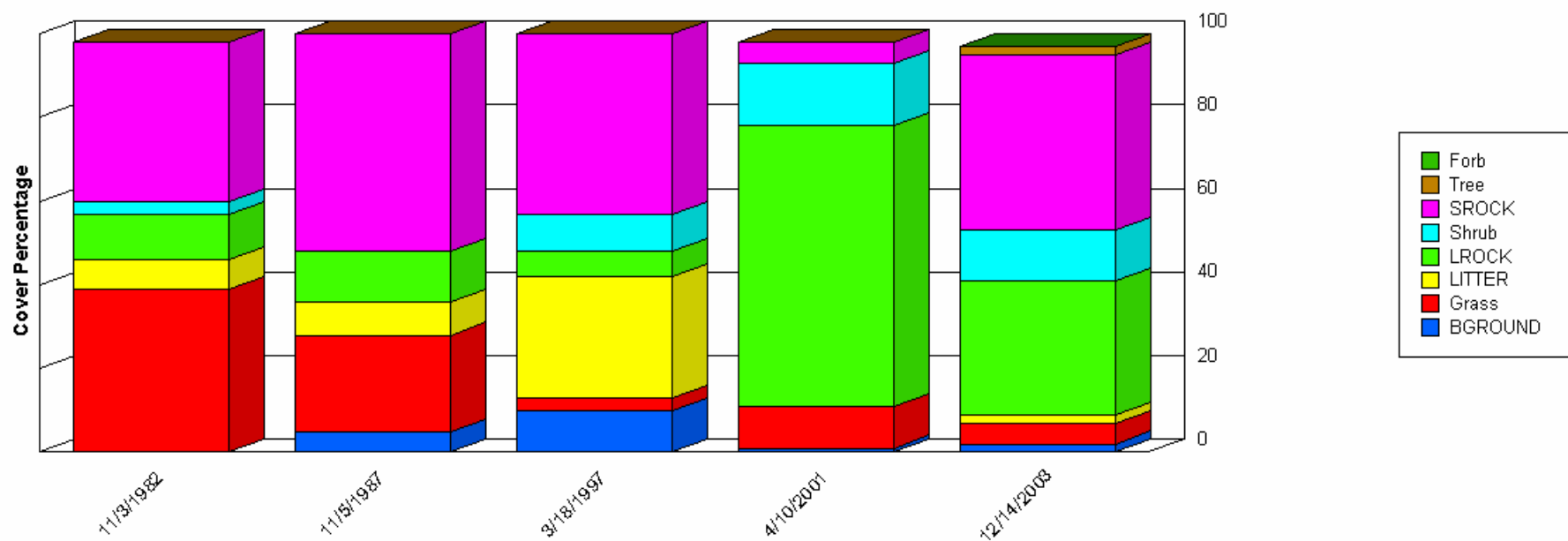


	11/2/1982	11/10/1987	2/14/1992	3/19/1997	4/13/2001	12/14/2003
Forb	43.32	21.51	19.00	53.08	0.00	18.27
Grass	362.71	217.57	240.00	309.82	22.39	23.60
Shrub	78.07	28.23	39.00	12.32	17.76	115.12
Tree	7.60	0.00	0.00	0.00	0.00	10.00
Total	491.70	267.32	298.00	375.22	40.15	166.99

Report Parameters

SITE NAME LIKE 64090-SIXTEEN-F235
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

Ground Cover Trends



	11/3/1982	11/5/1987	3/18/1997	4/10/2001	12/14/2003
BGROUND	0.00	5.00	10.00	1.00	2.00
Forb	0.00	0.00	0.00	0.00	0.00
Grass	39.00	23.00	3.00	10.00	5.00
LITTER	7.00	8.00	29.00	0.00	2.00
LROCK	11.00	12.00	6.00	67.00	32.00
Shrub	3.00	0.00	9.00	15.00	12.00
SROCK	38.00	52.00	43.00	5.00	42.00

	11/3/1982	11/5/1987	3/18/1997	4/10/2001	12/14/2003
Tree	0.00	0.00	0.00	0.00	2.00
Total	98.00	100.00	100.00	98.00	97.00

Report Parameters

SITE NAME LIKE 64090-SOUTH TURNER-F236
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

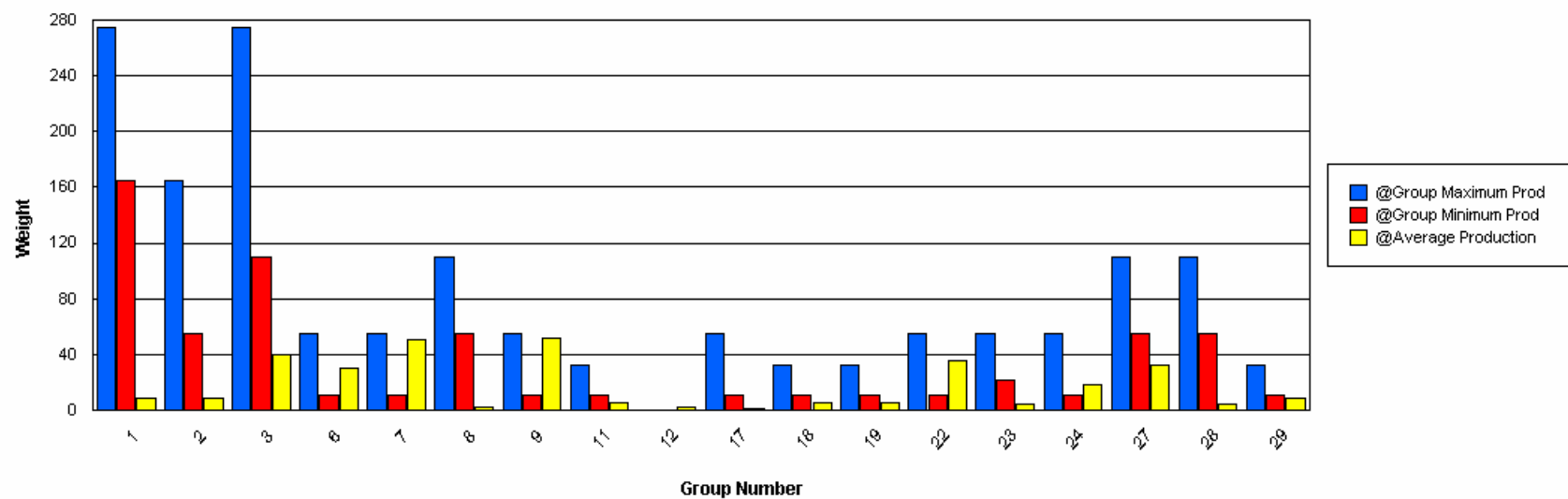
Functional / Structural Groups

Report Parameters

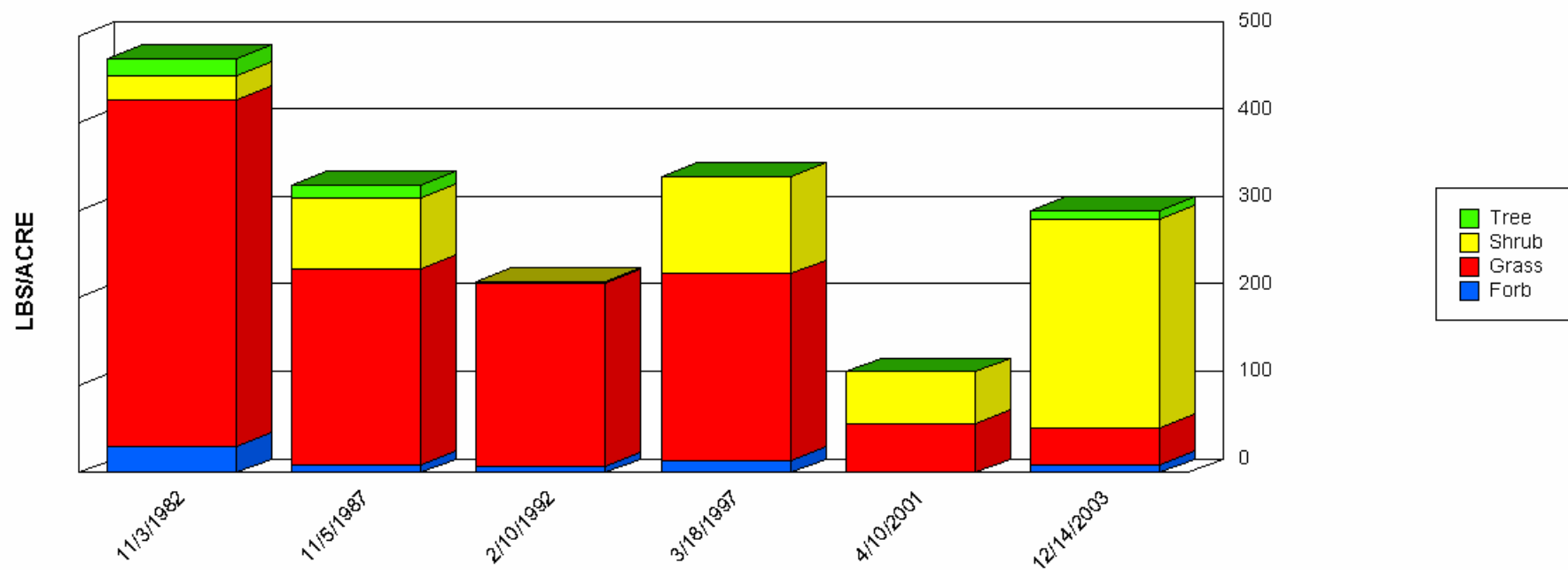
SITE NAME LIKE 64090-SOUTH TURNER-F236
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004
 MIN LBS TO GRAPH 1
 SELECTED ECOSITE 070DY151NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	BOCU	165	275	0.00	20.97	8.74	7.65
2	Grass	BOGR2	55	165	0.00	34.56	8.64	14.96
3	Grass	BOER4	110	275	8.50	76.00	39.72	20.24
5	Grass	MUSE	165	220	0.00	3.40	0.85	1.47
6	Grass	ARIST	11	55	0.00	48.88	30.11	17.57
7	Grass	TRMU	11	55	0.00	38.44	9.21	14.71
7	Grass	TRPI2	11	55	0.00	153.36	41.52	57.25
8	Grass	LEDU	55	110	0.00	9.10	2.72	3.76
9	Grass	BOHI2	11	55	0.00	90.00	38.09	32.99
9	Grass	LYPH	11	55	0.00	16.20	7.43	5.85
9	Grass	PAHA	11	55	0.00	22.00	5.74	8.11
9	Grass	SEMA5	11	55	0.00	2.96	0.99	1.40
11	Grass	HIMU2	11	33	0.00	4.06	2.03	2.03
11	Grass	LECO	11	33	0.00	7.19	2.86	3.50
11	Grass	MUAR2	11	33	0.00	2.11	0.42	0.84
12	Grass	ERPU8	0	0	0.00	10.00	2.27	3.88
14	Forb	PECTI	11	33	0.00	2.20	0.44	0.88
17	Forb	ERIOG	11	55	0.00	5.13	1.44	1.91
17	Forb	SENEC	11	55	0.00	0.67	0.18	0.26
18	Forb	AAFF	11	33	0.00	12.54	4.25	4.52
18	Forb	EUPHO	11	33	0.00	2.93	0.59	1.17
18	Forb	STEPH	11	33	0.00	1.47	0.29	0.59
19	Forb	CROTO	11	33	0.00	8.17	3.28	3.07
19	Forb	DEVE2	11	33	0.00	1.10	0.22	0.44
19	Forb	PPFF	11	33	0.00	2.10	0.92	0.88
19	Forb	SOEL	11	33	0.00	0.33	0.07	0.13

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
19	Forb	TRAM9	11	33	0.00	6.97	1.39	2.79
22	Shrub	NOLIN	11	55	0.00	80.00	34.17	35.15
22	Shrub	NOMI	11	55	0.00	2.24	1.12	1.12
23	Shrub	RHMI3	22	55	0.00	8.49	4.25	4.25
24	Shrub	GUSA2	11	55	0.00	72.00	18.63	27.91
27	Shrub	DAFO	55	110	0.00	13.79	3.80	4.71
27	Shrub	DALE2	55	110	7.33	10.00	8.67	1.33
27	Shrub	OPUNT	55	110	0.00	30.00	19.83	11.66
28	Shrub	MIBI3	55	110	0.00	16.00	4.50	6.69
29	Tree	ACGR	11	33	0.00	19.20	8.32	7.57
29	Shrub	ERLA12	11	33	0.00	5.33	1.07	2.13



Production Lbs/Acre Trends

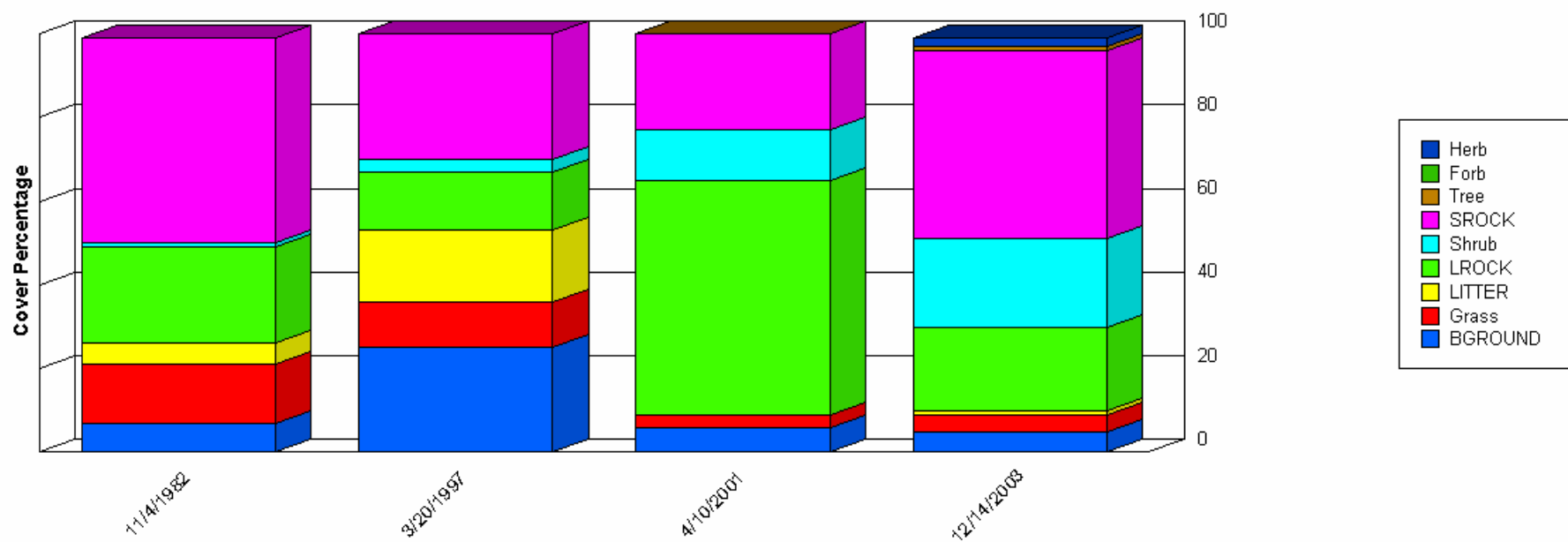


	11/3/1982	11/5/1987	2/10/1992	3/18/1997	4/10/2001	12/14/2003
Forb	30.06	9.24	8.00	13.42	0.00	8.52
Grass	396.28	224.01	209.00	214.12	56.20	43.25
Shrub	28.45	81.74	2.00	112.00	59.19	239.10
Tree	19.20	13.73	0.00	0.00	0.00	8.67
Total	473.99	328.72	219.00	339.54	115.39	299.53

Report Parameters

SITE NAME LIKE 64090-SOUTH TURNER-F236
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

Ground Cover Trends



	11/4/1982	3/20/1997	4/10/2001	12/14/2003
BGROUND	7.00	25.00	6.00	5.00
Forb	0.00	0.00	0.00	0.00
Grass	14.00	11.00	3.00	4.00
Herb	0.00	0.00	0.00	2.00
LITTER	5.00	17.00	0.00	1.00
LROCK	23.00	14.00	56.00	20.00
Shrub	1.00	3.00	12.00	21.00

	11/4/1982	3/20/1997	4/10/2001	12/14/2003
SROCK	49.00	30.00	23.00	45.00
Tree	0.00	0.00	0.00	1.00
Total	99.00	100.00	100.00	99.00

Report Parameters

SITE NAME LIKE 64090-SW TWIN BUTTE-F231
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

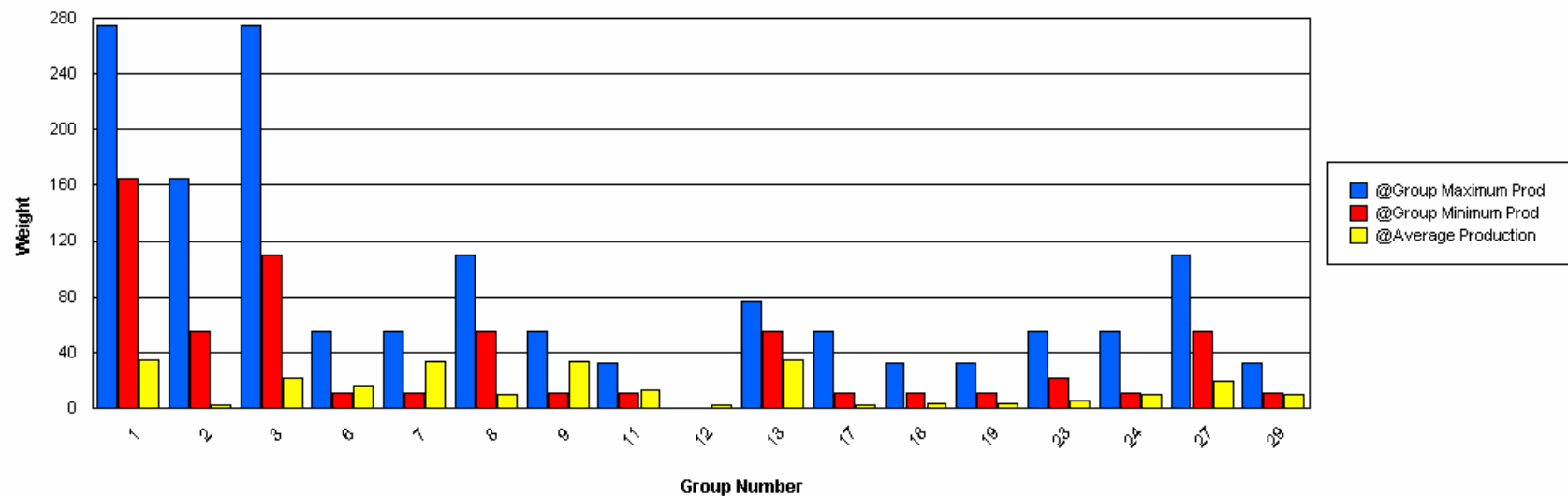
Functional / Structural Groups

Report Parameters

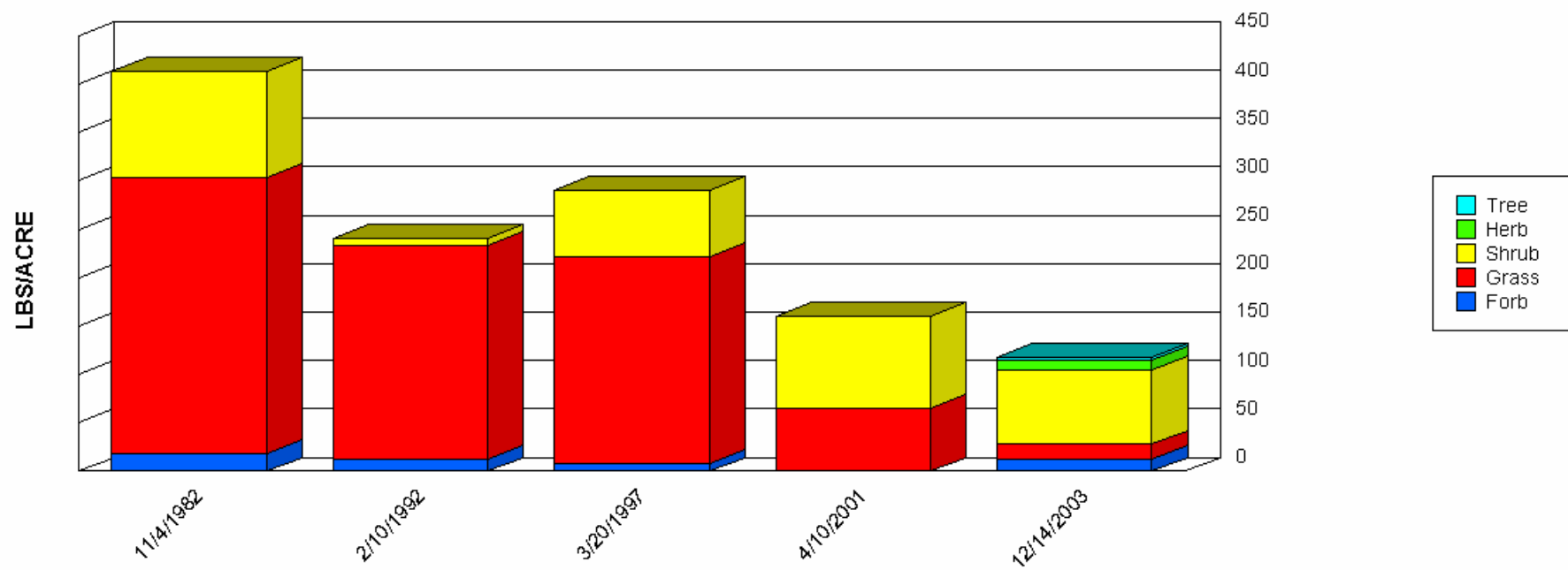
SITE NAME LIKE 64090-SW TWIN BUTTE-F231
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004
 MIN LBS TO GRAPH 1
 SELECTED ECOSITE 070DY151NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	BOCU	165	275	0.00	106.40	34.91	39.74
2	Grass	BOGR2	55	165	0.00	8.16	2.12	3.49
3	Grass	BOER4	110	275	1.13	47.60	21.43	15.81
6	Grass	ARIST	11	55	0.00	33.00	15.92	11.49
7	Grass	SPCR	11	55	0.00	0.55	0.14	0.24
7	Grass	TRMU	11	55	0.00	36.58	9.30	15.75
7	Grass	TRPI2	11	55	0.00	49.14	24.44	20.77
8	Grass	LEDU	55	110	0.00	39.68	9.92	17.18
9	Grass	BOHI2	11	55	0.00	55.03	14.99	20.49
9	Grass	LYPH	11	55	0.00	37.00	13.71	14.39
9	Grass	PAHA	11	55	0.00	13.00	4.55	4.88
11	Grass	HIMU2	11	33	0.00	4.06	2.03	2.03
11	Grass	LECO	11	33	0.00	1.19	0.30	0.51
11	Grass	MUAR2	11	33	0.00	8.43	3.67	3.51
11	Grass	SCBR2	11	33	2.37	17.00	6.96	5.24
12	Grass	ERPU8	0	0	0.00	6.23	2.23	2.56
13	Shrub	PAIN2	55	77	7.00	60.95	34.74	19.90
17	Forb	ERIOG	11	55	0.00	2.46	0.62	1.07
17	Forb	SELO	11	55	0.00	5.83	1.46	2.53
18	Forb	AAFF	11	33	0.00	7.44	3.36	3.40
18	Forb	DYPA	11	33	0.00	1.83	0.46	0.79
19	Forb	CASSI	11	33	0.00	0.27	0.07	0.12
19	Forb	CROTO	11	33	0.00	7.00	2.49	2.62
19	Forb	LINUM	11	33	0.00	1.64	0.41	0.71
19	Forb	TRAM9	11	33	0.00	3.28	0.82	1.42
23	Shrub	RHMI3	22	55	0.00	10.92	5.46	5.46

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
24	Shrub	GUSA2	11	55	0.00	34.50	10.21	14.26
27	Shrub	OPUNT	55	110	0.00	62.67	19.73	25.16
29	Shrub	ACACI	11	33	0.00	29.50	7.38	12.77
29	Shrub	ACCO2	11	33	0.00	4.00	2.00	2.00
29	Shrub	ALWR	11	33	0.00	1.82	0.61	0.86
29	Shrub	ERICA	11	33	0.00	1.57	0.39	0.68



Production Lbs/Acre Trends

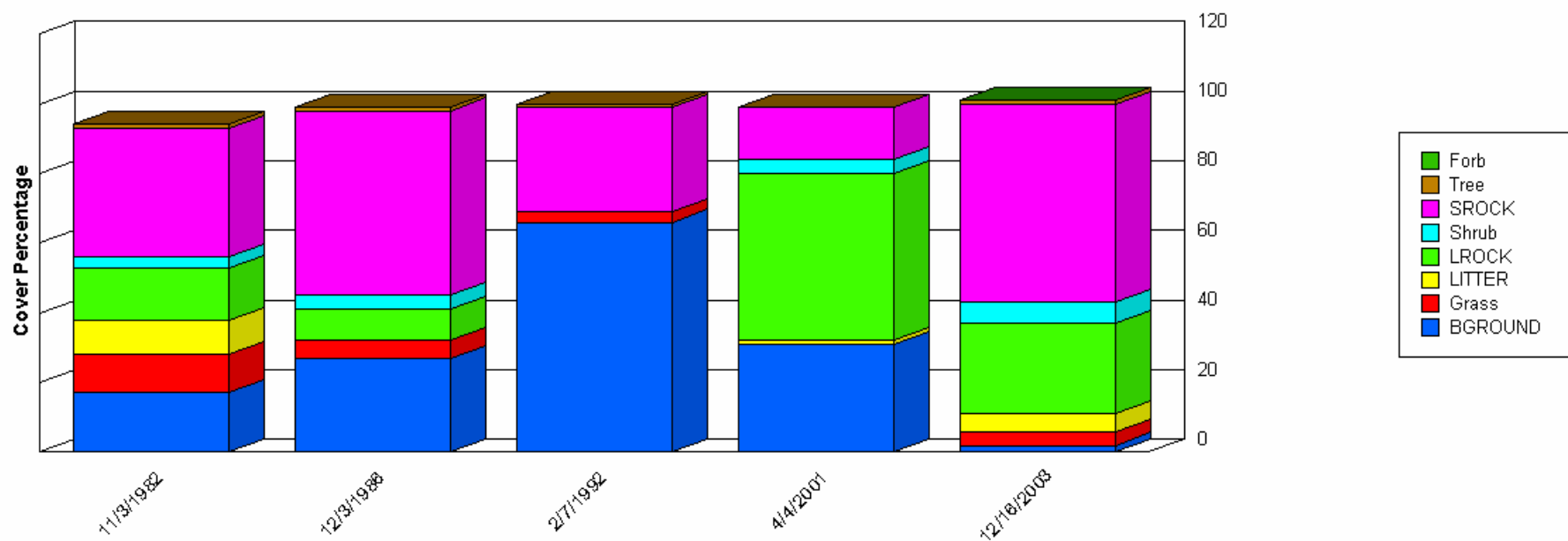


	11/4/1982	2/10/1992	3/20/1997	4/10/2001	12/14/2003
Forb	18.91	13.00	7.44	0.00	11.89
Grass	285.19	221.00	214.44	65.70	15.92
Herb	0.00	0.00	0.00	0.00	10.32
Shrub	109.69	7.00	68.74	94.87	76.28
Tree	0.00	0.00	0.00	0.00	4.00
Total	413.79	241.00	290.62	160.57	118.42

Report Parameters

SITE NAME LIKE	64090-SW TWIN BUTTE-F231
ON/AFTER	10/01/1982
ON/BEFORE	09/30/2004

Ground Cover Trends



	11/3/1982	12/3/1986	2/7/1992	4/4/2001	12/16/2003
BGROUND	17.00	27.00	66.00	31.00	2.00
Forb	0.00	0.00	0.00	0.00	0.00
Grass	11.00	5.00	3.00	0.00	4.00
LITTER	10.00	0.00	0.00	1.00	5.00
LROCK	15.00	9.00	0.00	48.00	26.00
Shrub	3.00	4.00	0.00	4.00	6.00
SROCK	37.00	53.00	30.00	15.00	57.00

	11/3/1982	12/3/1986	2/7/1992	4/4/2001	12/16/2003
Tree	1.00	1.00	1.00	0.00	1.00
Total	94.00	99.00	100.00	99.00	101.00

Report Parameters

SITE NAME LIKE 64090-W SAMPSON-F224
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

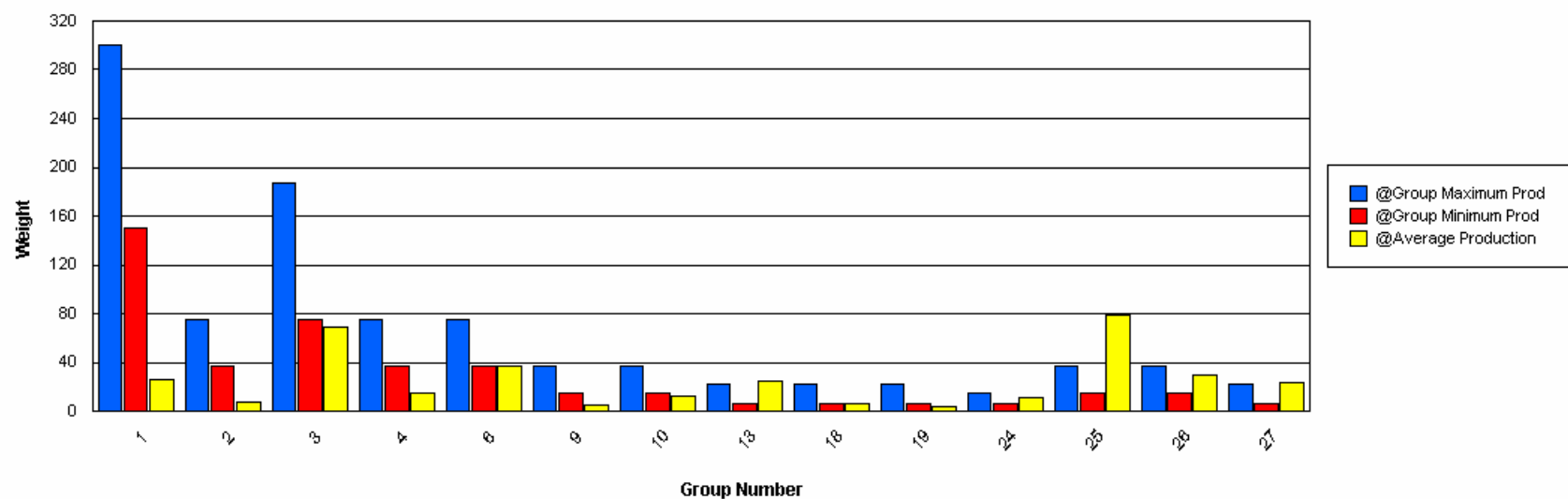
Functional / Structural Groups

Report Parameters

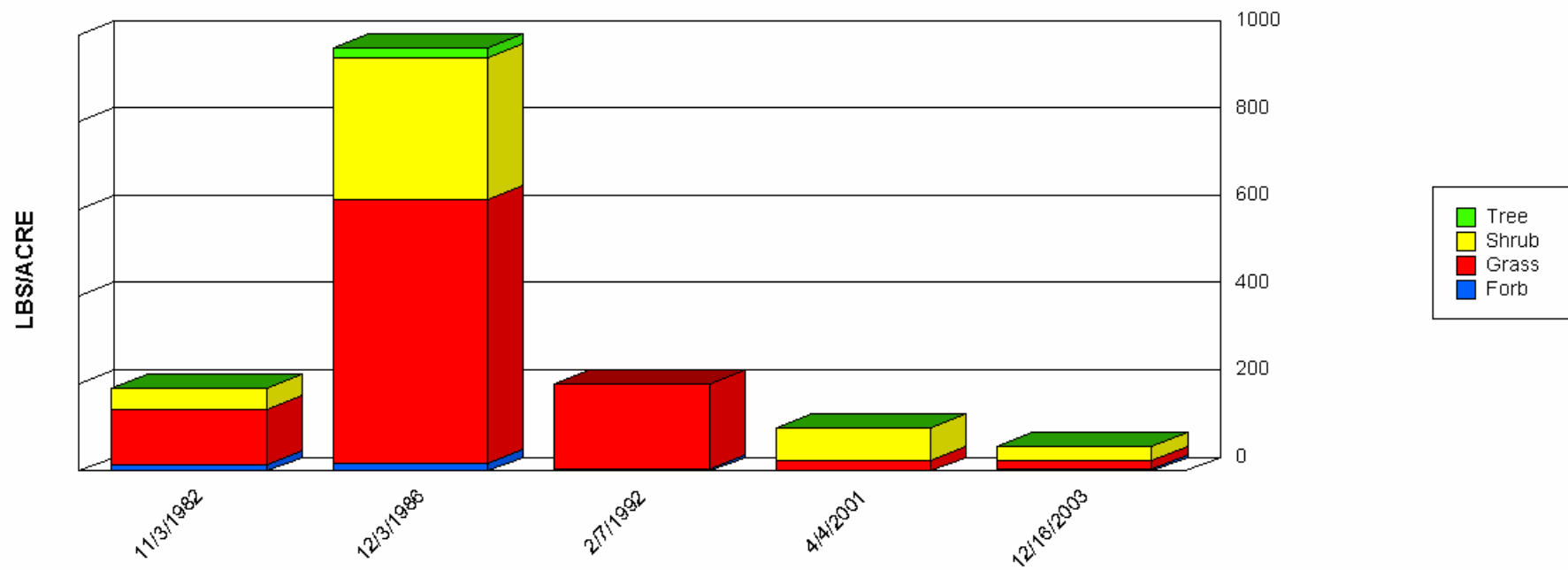
SITE NAME LIKE 64090-W SAMPSON-F224
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004
 MIN LBS TO GRAPH 1
 SELECTED ECOSITE 070DY158NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	BOER4	150	300	1.98	71.68	26.07	24.19
2	Grass	BOCU	37	75	0.00	28.20	7.89	11.81
3	Grass	TRMU	75	187	0.00	122.83	33.11	45.84
3	Grass	TRPI2	75	187	0.00	98.39	36.24	36.24
4	Grass	BOGR2	37	75	0.00	29.33	8.96	11.98
4	Grass	SPCR	37	75	0.00	17.46	5.82	8.23
5	Grass	SCBR2	37	75	0.00	1.95	0.49	0.84
6	Grass	ARIST	37	75	0.00	133.28	36.98	49.69
9	Grass	PAHA	15	37	0.00	12.00	5.26	4.15
10	Grass	BOHI2	15	37	0.00	26.09	6.81	11.13
10	Grass	ERPU8	15	37	0.00	24.00	5.70	9.21
10	Grass	SIHY	15	37	0.00	1.76	0.59	0.83
13	Grass	LECO	7	22	0.00	7.93	2.64	3.74
13	Grass	MUAR2	7	22	0.00	60.11	21.71	22.50
14	Forb	CROTO	15	37	0.00	1.96	0.96	0.96
15	Forb	SELO	7	37	0.00	2.42	0.81	1.14
16	Forb	PEPA2	7	22	0.00	0.37	0.09	0.16
17	Forb	SPAN3	7	22	0.00	1.25	0.31	0.54
18	Forb	AAFF	7	22	0.00	15.12	5.04	7.13
18	Forb	ABUTI	7	22	0.00	3.30	0.83	1.43
18	Forb	BOERH2	7	22	0.00	0.37	0.09	0.16
18	Forb	DALEA2	7	22	0.00	3.30	0.83	1.43
18	Forb	FROEL	7	22	0.00	0.37	0.09	0.16
19	Forb	CHCO	7	22	0.00	0.37	0.09	0.16
19	Forb	ERTE13	7	22	1.14	5.00	3.07	1.93
19	Forb	HOFFM	7	22	0.00	0.37	0.09	0.16

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
19	Forb	LEER	7	22	0.00	2.93	0.73	1.27
19	Forb	MELE2	7	22	0.00	0.73	0.18	0.32
19	Forb	PPFF	7	22	0.00	1.31	0.43	0.53
24	Shrub	OPUNT	7	15	0.00	22.00	11.00	11.00
25	Shrub	GUSA2	15	37	9.36	250.55	79.31	100.10
26	Shrub	DAFO	15	37	0.58	8.77	4.68	4.10
26	Shrub	KRAME	15	37	0.00	73.67	24.56	34.73
27	Shrub	ACCO2	7	22	0.00	34.67	17.33	17.33
27	Tree	ACGR	7	22	0.00	23.89	6.52	10.04
27	Shrub	EULA5	7	22	0.00	1.52	0.38	0.66



Production Lbs/Acre Trends

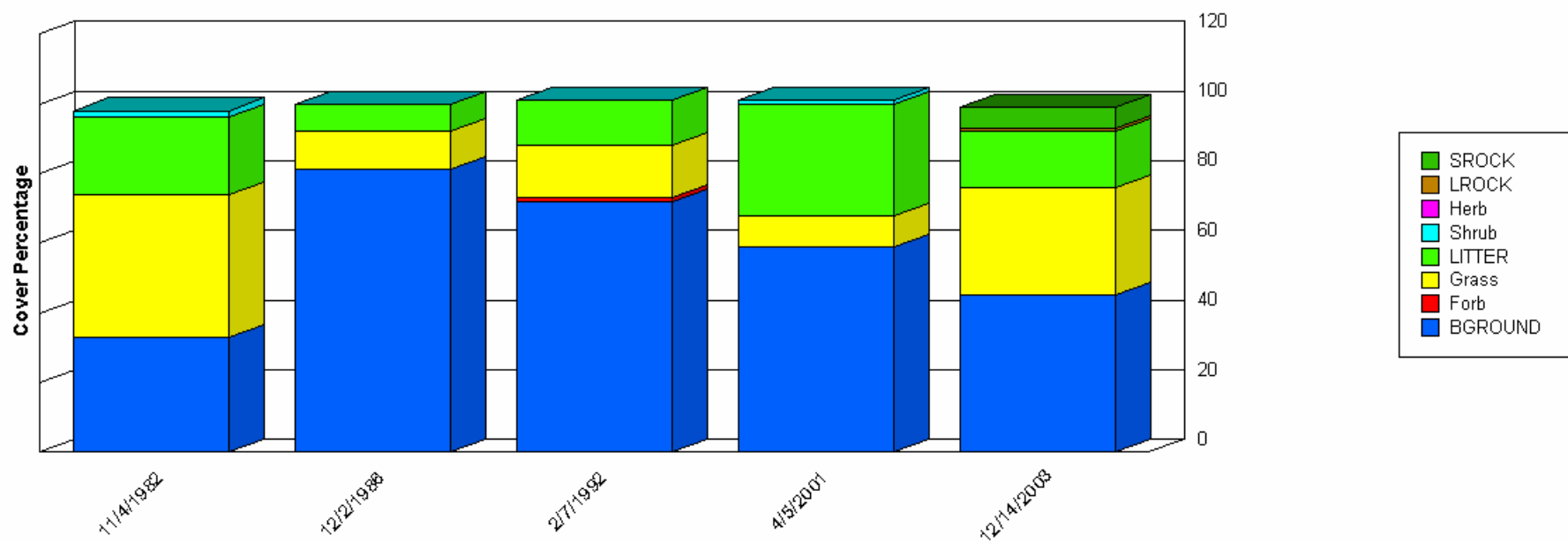


	11/3/1982	12/3/1986	2/7/1992	4/4/2001	12/16/2003
Forb	15.71	17.54	5.00	0.00	5.09
Grass	124.34	604.60	196.00	22.85	18.75
Shrub	49.36	324.22	0.00	74.92	32.30
Tree	1.20	23.89	0.00	0.00	1.00
Total	190.61	970.25	201.00	97.77	57.14

Report Parameters

SITE NAME LIKE 64090-W SAMPSON-F224
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

Ground Cover Trends



	11/4/1982	12/2/1986	2/7/1992	4/5/2001	12/14/2003
BGROUND	33.00	81.00	72.00	59.00	45.00
Forb	0.00	0.00	1.00	0.00	0.00
Grass	41.00	11.00	15.00	9.00	31.00
Herb	0.00	0.00	0.00	0.00	0.00
LITTER	22.00	8.00	13.00	32.00	16.00
LROCK	0.00	0.00	0.00	0.00	1.00
Shrub	2.00	0.00	0.00	1.00	0.00

	11/4/1982	12/2/1986	2/7/1992	4/5/2001	12/14/2003
SROCK	0.00	0.00	0.00	0.00	6.00
Total	98.00	100.00	101.00	101.00	99.00

Report Parameters

SITE NAME LIKE 64090-W TWIN BUTTE-F230
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004

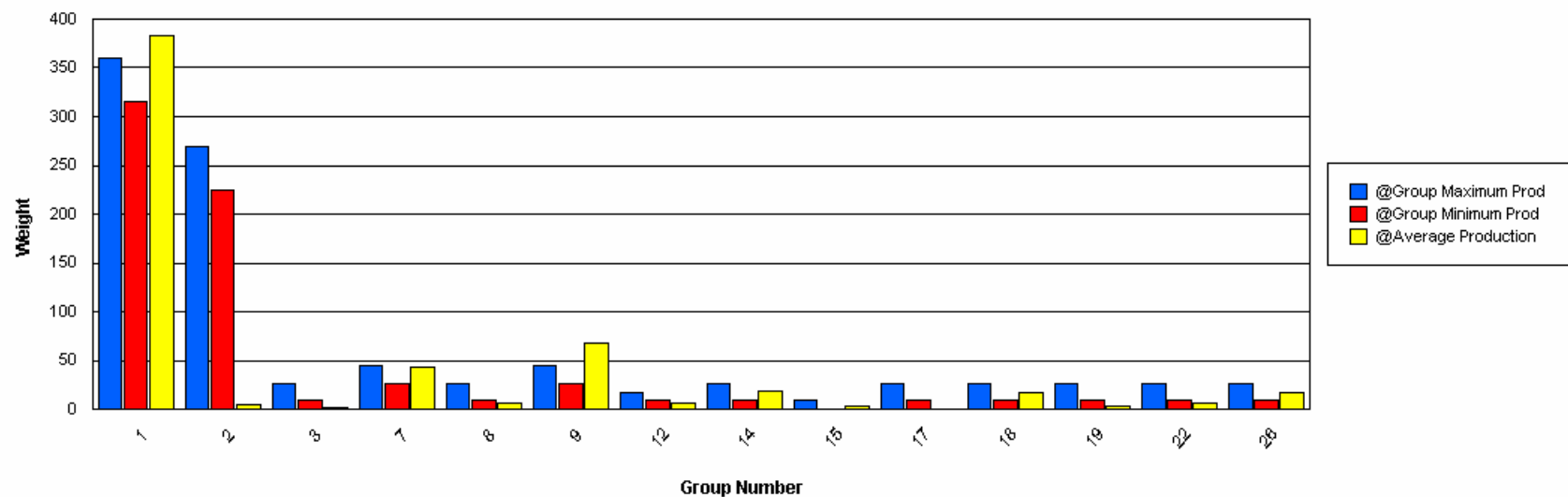
Functional / Structural Groups

Report Parameters

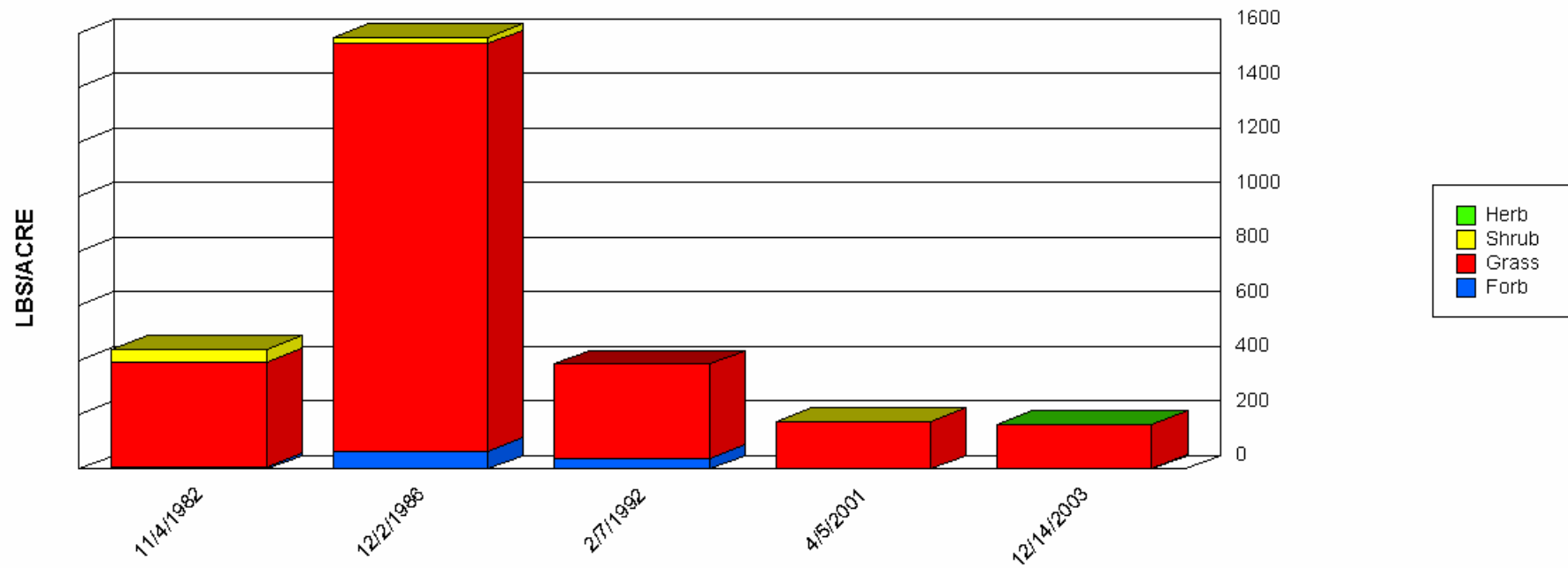
SITE NAME LIKE 64090-W TWIN BUTTE-F230
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004
 MIN LBS TO GRAPH 1
 SELECTED ECOSITE 042CY007NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	HIMU2	315	360	133.73	852.00	329.32	267.01
1	Grass	SCBR2	315	360	13.65	106.79	54.02	31.49
2	Grass	BOER4	225	270	0.00	16.00	5.52	7.41
2	Grass	BOGR2	225	270	0.00	0.91	0.23	0.39
3	Grass	BOCU	9	27	0.00	4.20	1.37	1.72
7	Grass	ARIST	27	45	0.00	124.80	29.84	47.81
7	Grass	SPCR	27	45	0.00	49.79	13.54	21.01
8	Grass	PAOB	9	27	0.00	20.00	7.00	8.19
9	Grass	MUAR	27	45	0.00	51.00	12.63	19.47
9	Grass	MUAR2	27	45	0.00	196.65	51.95	83.59
9	Grass	MURE	27	45	0.00	8.88	3.76	3.88
12	Grass	PAHA	9	18	0.00	18.17	6.39	7.39
14	Grass	TRMU	9	27	0.00	57.65	19.22	27.18
15	Grass	TRPI2	0	9	0.00	12.42	3.11	5.38
17	Grass	CHLOR	9	27	0.00	1.76	0.44	0.76
17	Grass	ERPU8	9	27	0.00	1.21	0.40	0.57
17	Grass	SCPA	9	27	0.00	1.17	0.29	0.51
18	Forb	SPAN3	9	27	0.00	0.63	0.16	0.27
18	Forb	SPCO	9	27	0.00	0.55	0.14	0.24
18	Forb	SPHAE	9	27	0.00	52.38	17.46	24.69
19	Forb	CROTO	9	27	0.00	0.65	0.28	0.29
19	Forb	PENA	9	27	0.00	7.56	2.44	3.09
21	Forb	HOFFM	9	27	0.00	0.37	0.09	0.16
22	Forb	AAFF	9	27	0.00	20.00	6.62	8.17
22	Forb	COCO4	9	27	0.00	0.37	0.09	0.16
23	Forb	AMPS	9	27	0.00	1.05	0.26	0.46

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
25	Shrub	YUCCA	9	27	0.00	0.33	0.11	0.16
26	Shrub	GUSA2	9	27	0.00	44.16	16.37	18.25
26	Shrub	OPUNT	9	27	0.00	2.20	0.58	0.93
27	Shrub	HAPLO2	9	27	0.00	0.37	0.09	0.16
28	Shrub	PRGL2	0	0	0.00	2.00	0.87	0.84



Production Lbs/Acre Trends



	11/4/1982	12/2/1986	2/7/1992	4/5/2001	12/14/2003
Forb	5.81	66.42	37.00	0.00	3.73
Grass	388.65	1,494.08	348.00	173.32	160.95
Herb	0.00	0.00	0.00	0.00	0.48
Shrub	46.73	23.77	0.00	0.00	1.14
Total	441.19	1,584.27	385.00	173.32	166.30

Report Parameters

SITE NAME LIKE 64090-W TWIN BUTTE-F230
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2004